From: Emma Worbeck [redacted]
To: App Store Global [redacted]
CC: Dave Eyler [redacted], Abishek Ashok [redacted]), Maryann Berkowitz [redacted], Kristi Manclow [redacted]), Christopher Campbell [redacted], Alastair Morse [redacted]), Ben Satterfield [redacted]
BCC:
Subject: Apple Confidential – US App Store iOS Developer Survey Report
Attachments: Developer Research Final US Report_abridged v8_03.14.15.key.zip;
Sent: 03/14/2015 07:56:51 PM 0000 (GMT)

Hi all,

Thank you to everyone who was able to attend the App Store iOS Developer Survey Report presentation this week. I have attached the report for your reference, with a few additional slides included for good measure.

Please reach out to myself or Chris Campbell if you have any questions.

Best regards,
Emma

App Store Developers Profiling Research

March 2015

This survey was a cross-functional endeavor between:

- App Store Marketing
- App Store Business Management
- iTunes Analytics
- and the Market Research & Analysis team led by Melinda Sammons

This is an abridged version of the report.

This report focuses on US respondents; we have also surveyed UK respondents and are working with the Market Research team to finalize reporting. The initial draft of the UK report indicates that responses are very consistent with those of the US respondents. Once the UK report is finalized we will make it available to the team.

PX- 2300.2

Why this report?

Purpose: To understand marketing and business development of iOS app developers

Key areas include:

- Developer profiles
- Business profile
- Marketing profile
- International profile
- Analytics tools
- App Store guidance and tools

So why did we survey our developers? Our research objectives were:
- to gain a better understanding of iOS app developers' business and marketing levers, challenges, and areas of focus
- to capture actionable feedback on our tools and services
- and to capture data that we can benchmark against in future surveys

We focused on these key areas:
- Developer profiles
- Business profile
- Marketing profile
- International profile
- Analytics tools
- App Store guidance and tools

PX- 2300.3

Understanding App Store developers

Collect

3,530 online interviews of app developers

Conducted December 18, 2014 - January 13, 2015

Measure

Marketing and business development

Satisfaction with App Store guidance and tools

Profile

Marketing decision makers and business decision makers

Large/mid/small tier developers

Method: Apple Market Research conducted an online survey with 3,530 app developers in the US who are at least somewhat involved in business or marketing decisions. Respondents were screened to exclude those whose companies are not located in the US. Results are weighted to match the distribution of size based on categories assigned by Developer Relations.

Statistical testing across large and mid tier developers compared to small tier developers was conducted at a 95% significance level and is indicated with arrows. To simplify reporting, results of statistical testing may not be shown for values under 5%.

Other notes: To simplify reporting, chart labels for values under 3% may not be shown. The term "top-2 box"/ bottom-2 box refers to the total of the top 2 results/ bottom 2 results in a 5-point scale. Totals, sub-totals, and nets may be off by a point or two due to rounding.

We conducted this survey From December 2014 to January 2015.
We sent the survey to a range of developers, including our approximately 300 US managed developers. We got a low response rate from our managed developers so we retargeted them in February and are still assessing the results. We attribute the low response rate to the time of year—we were delayed in getting the survey out and it was sent right around Christmastime—so a learning for the next survey is to get it out to developers by October.
This is how we did the research:
An online survey was emailed to US developers

- respondents had at least 1 app published on app store in past 2 years
- respondents had to identify being at least somewhat involved in business or marketing decisions

[190,721 surveys sent]

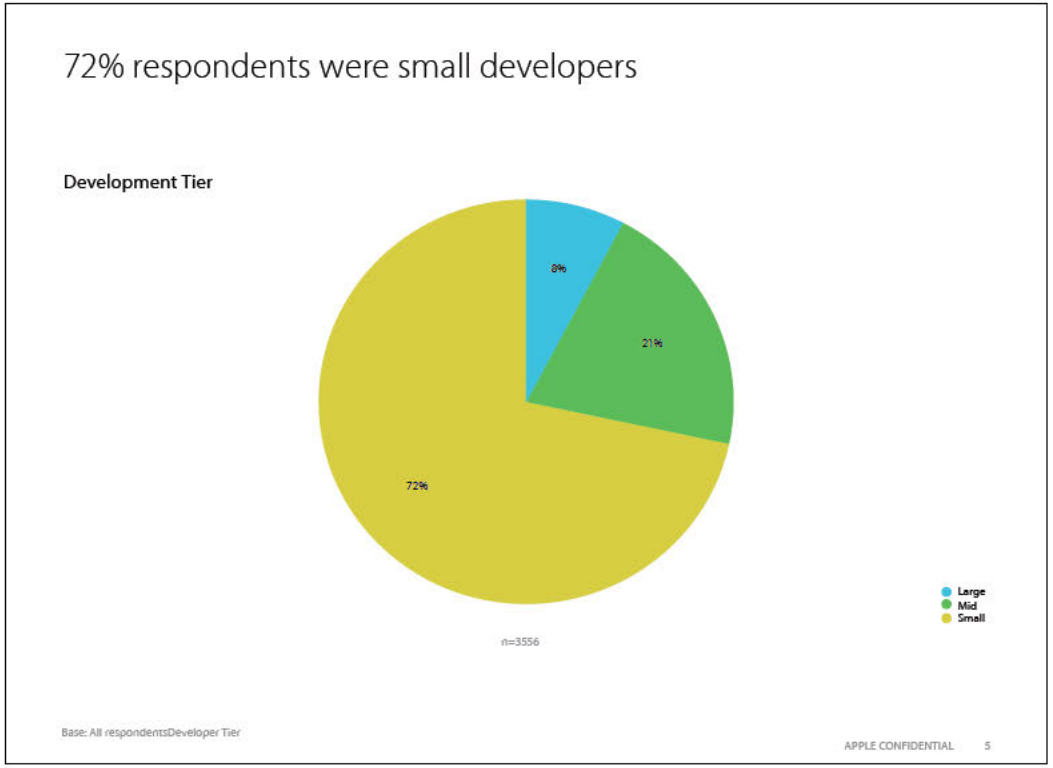
PX- 2300.4

Developer Profile

APPLE CONFIDENTIAL 4

Here’s a closer look at the profiles of those surveyed.

PX- 2300.5

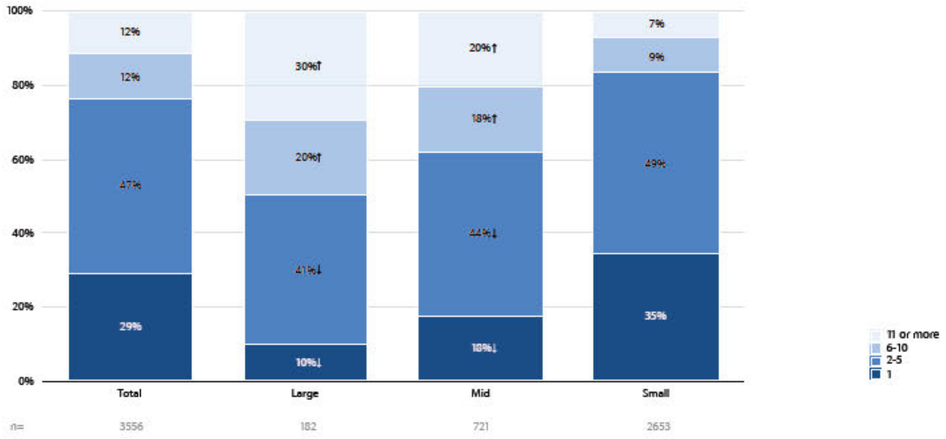


- We worked with the Analytics team to define “small”, “mid” and “large” tier developers. Tiers were based on downloads rather than billings.
- The top developers contribute a large proportion of our downloads. To accommodate this top-heaviness, the buckets are scaling in size—we bracket by 99th percentile for large/ 98th to 90th for medium and 89th and below for small.
- We received the majority of responses from developers who fall into the “small” tier, which was consistent with our expectations.

PX- 2300.6

47% have published 2-5 apps on the App Store in the last two years, with large tier developers more likely to publish more apps

Number of Apps Published



Base: All respondentsS4: How many apps has your company published on the App Store in the last two years?Note: Arrows denote comparison to small tier developers

We looked at results by whether respondents were involved in business or marketing decisions, and the findings were virtually similar between the two groups, so we're showing the results in total (except where the question was only asked of 1 group).
What was more interesting was looking at results by developer tier, so most charts show the results this way.

Where you see arrows, that denotes comparison to small-tier developers.

To begin we asked how many apps has your company published on the App Store in the last two years; 47% have published 2-5 app.

PX- 2300.7

Games are the most commonly developed apps, especially among large tier developers

Primary Apps Categories for iOS Apps

	Total	Large	Mid	Small
Games	26%	38% ↑	26%	25%
Education	20%	19%	20%	20%
Utilities	18%	9% ↓	15% ↓	20%
Entertainment	18%	20%	19%	17%
Productivity	17%	16%	17%	17%
Business	17%	10% ↓	12% ↓	19%
Lifestyle	15%	13%	15%	15%
Social Networking	11%	13%	9%	11%
Health & Fitness	9%	8%	8%	9%
Photo & Video	8%	9%	10% ↑	8%
Reference	6%	3% ↓	6%	6%
Travel	6%	8%	6%	6%
Kids	6%	8% ↑	8% ↑	5%
Music	6%	6%	7% ↑	5%
Finance	5%	4%	6%	5%
Sports	5%	6%	4% ↓	6%
Medical	5%	2% ↓	5%	5%
News	4%	7% ↑	5%	4%
Food & Drink	4%	5%	3%	4%
Books	3%	4%	4%	3%
Navigation	3%	2%	2%	3%
Other	3%	1%	2%	3%
Weather	2%	3%	2%	2%
Newsstand	1%	2%	2%	1%
Catalogs	1%	1%	1%	1%
n=	3556	182	721	2653

%	10	20	30	40	50	60	70	80	90	100

Base: All respondentsA1: What are the primary app categories you develop iOS apps for? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

We asked: What are the primary app categories you develop iOS apps for? (with multiple responses allowed)

Games are the most commonly developed apps, especially among large tier developers, of whom 38% develop games.

PX- 2300.8

Of those who develop games, 37% develop arcade games

Large tier developers are more likely to develop most types of games

Games Sub Categories for iOS apps

	Total	Large	Mid	Small
Arcade	37%	39%	29%↓	39%
Puzzle	33%	36%	37%	31%
Action	31%	45%↑	28%	30%
Educational	19%	13%	24%	19%
Adventure	19%	32%↑	13%	18%
Strategy	18%	38%↑	15%	16%
Family	18%	19%	20%	17%
Simulation	12%	29%↑	15%↑	9%
Word	11%	12%	16%↑	10%
Card	11%	17%↑	19%↑	7%
Board	11%	13%	15%↑	9%
Role Playing	10%	28%↑	9%	8%
Casino	7%	13%↑	11%↑	4%
Trivia	6%	10%↑	7%	5%
Sports	5%	12%↑	7%↑	3%
Racing	5%	13%↑	10%↑	2%
Music	3%	4%	4%	3%
Dice	3%	6%	2%	3%
Other	2%	3%	2%	2%
n=	922	69	189	664

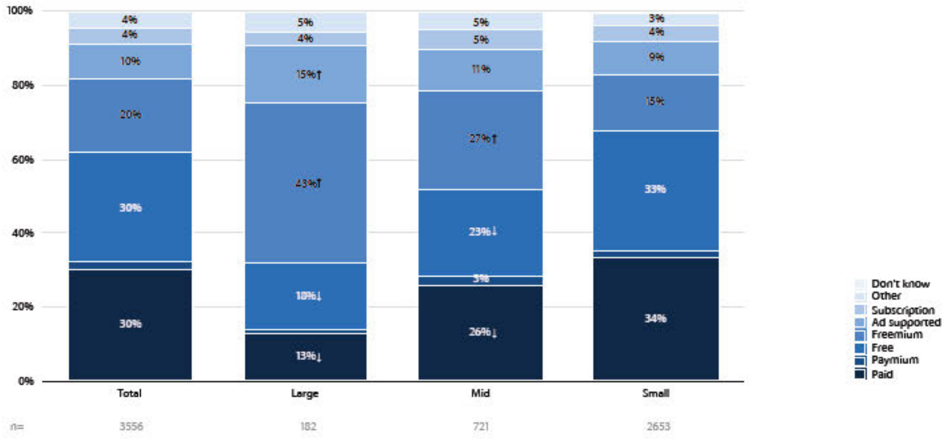
%	10	20	30	40	50	60	70	80	90	100

Base: Develops iOS gamesA2: What are the primary game sub-categories you develop iOS game apps for? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

PX- 2300.9

Free, ad-supported, and freemium account for 70% of business models

Primary Business Model for iOS Apps



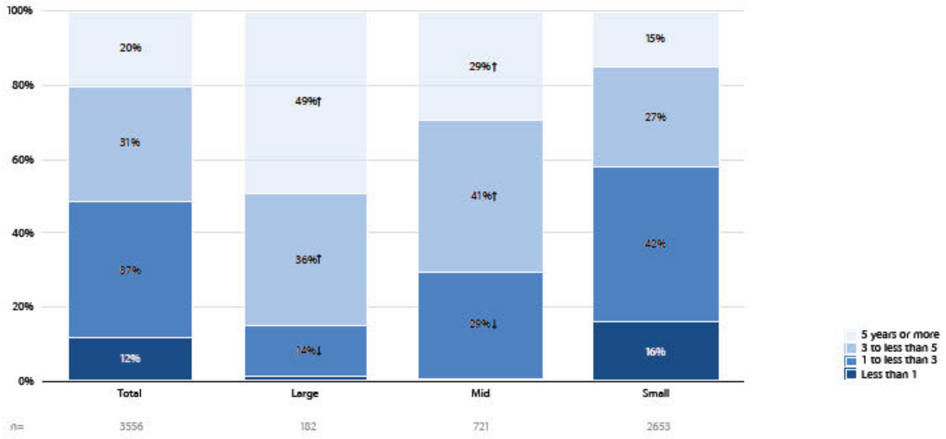
Base: All respondentsA3: What is the primary business model for your iOS apps?Note: Arrows denote comparison to small tier developers

We asked, what is the primary business model for your iOS apps?
Free, ad-supported and freemium apps account for 70% of all developers
13% of large developers have paid business models, compared with 34% of small developers

PX- 2300.10

Half say their company has been in the mobile app business for less than 3 years; large developers have been in business longer

Years in Mobile App Business



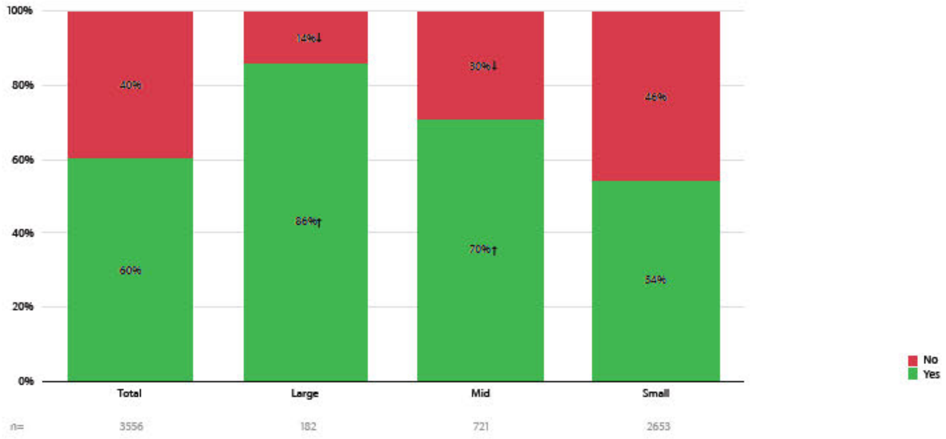
Base: All respondentsA4: How many years has your company been in the mobile app business?Note: Arrows denote comparison to small tier developers

Half of the respondents say their company has been in the mobile app business for less than 3 years

PX- 2300.11

60% of developers develop for other mobile operating systems; large and mid tier developers are more likely to develop for other platforms

Develops Apps for Other Mobile OS

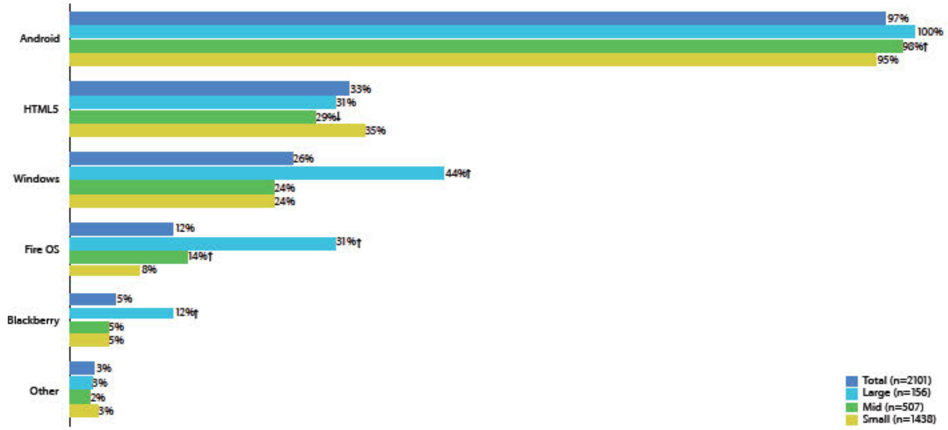


Base: All respondentsA5: Do you develop apps for mobile operating systems and platforms other than iOS?Note: Arrows denote comparison to small tier developers

We asked, Do you develop apps for mobile operating systems and platforms other than iOS? Large and mid tier developers are more likely to develop for other platforms (86% and 70% respectively)

Of those who develop for other operating systems and platforms, almost all develop for Android devices

Other Mobile Platforms Develop For



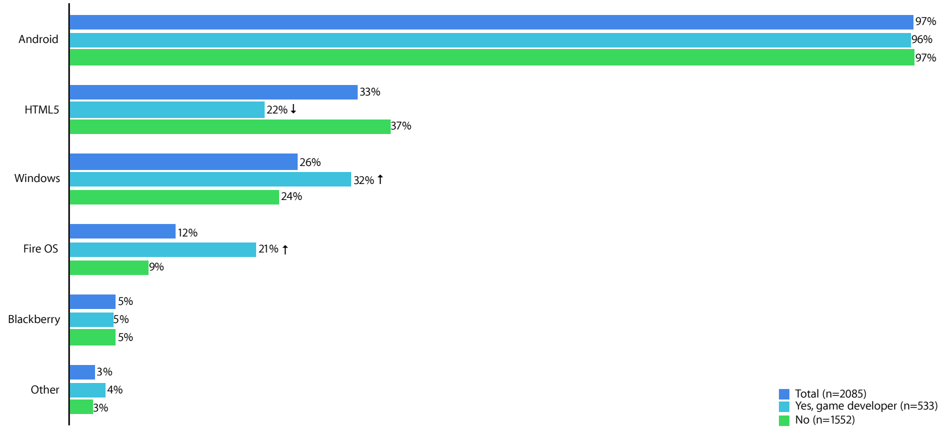
Base: Develops apps for other mobile platformsA6: What other mobile operating systems and platforms do you develop apps for? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

We also asked which mobile operating systems and platforms they developed for. As expected, almost all develop for Android. Large developers were also more likely to develop for Windows and Fire OS.

PX- 2300.13

Those who develop games are more likely to develop for Windows and Fire OS but less likely to develop for HTML5

Other Mobile Platforms Develops For By Game Developer

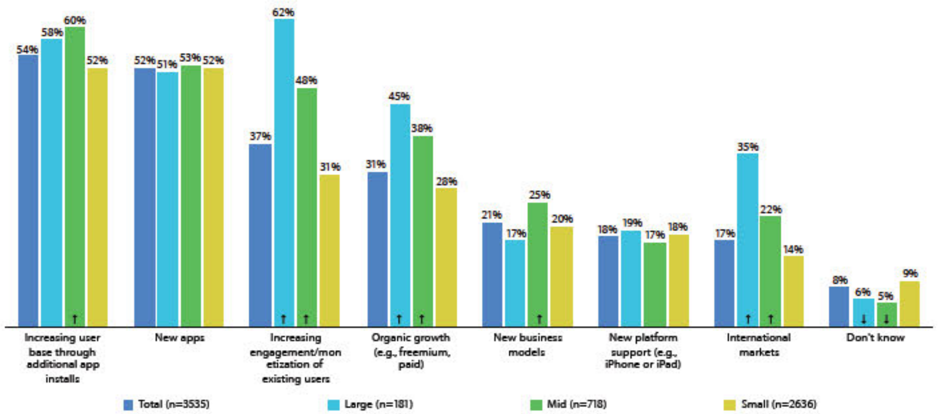


Base: Develops apps for non-iOS devicesA6: What other mobile operating systems and platforms do you develop apps for? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

PX- 2300.14

Half say increasing their user base or introducing new apps are the areas they expect the most growth next year

Expected Growth Areas



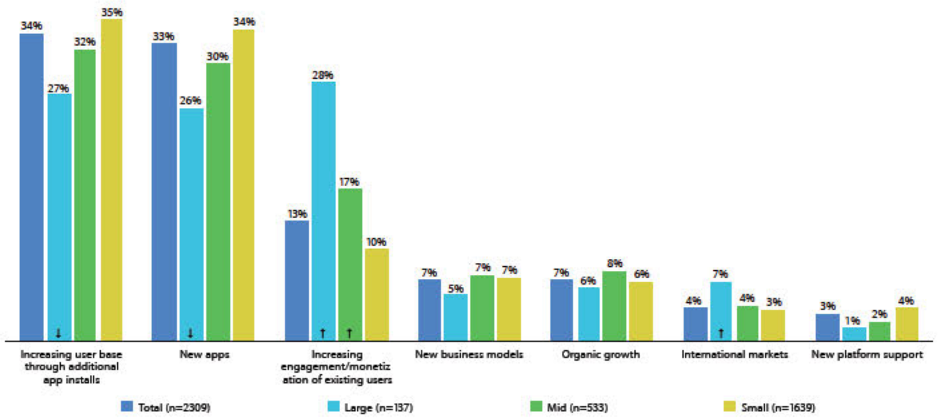
Base: All respondentsA7: In which of the following areas do you expect to drive the most growth for your iOS app business next year? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

We asked, In which of the following areas do you expect to drive the most growth for your iOS app business next year? We allowed multiple responses.

PX- 2300.15

One-third say increasing their user base is area they expect the most growth next year

Largest Expected Growth Area



Base: Expects growth from at least two areasA8: And what is the one area where you expect to drive the most growth for your iOS app business next yearNote: Arrows denote comparison to small tier developers

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When we asked developers to then select the <u>one</u> area where they expect to drive the most growth for their iOS app business next year, what was notable was that international expansion is not expected to be a primary area of growth. This could be attributed to the barrier to entry presented by localization and a lack of market expertise.

Another takeaway from this slide is that large developers are focusing on retention and engagement rather than just on user acquisition. This shift in focus to monetizing existing users is a growing trend we're seeing.

PX- 2300.16

Half of all who responded say their company's annual revenue is less than $250,000

Company's Annual Revenue

	Total	Large	Mid	Small
Under $250,000	54%	11% ↓	38% ↓	63%
$250,000 - $4,999,999	15%	26% ↑	20% ↑	13%
$5,000,000 - $49,999,999	5%	8% ↑	8% ↑	4%
$50,000,000 or more	6%	23% ↑	9% ↑	3%
Prefer not to say	20%	33% ↑	25% ↑	18%
n=	3402	172	692	2538

%	10	20	30	40	50	60	70	80	90	100

Base: Respondents in the USG1: What is your company's annual revenue?Note: Arrows denote comparison to small tier developers

We asked developers about their annual revenue. 63% of small developers have revenue under $250K annually.

23% of large developers have annual revenue of over $50 million, with another 33% preferring not to say, so that percentage is likely larger.

PX- 2300.17

One-third say their company's current revenue comes from mobile apps

Percent of Revenue from Mobile Apps

	Total	Large	Mid	Small
0%	14%	3% ↓	7% ↓	18%
1%-29%	19%	12% ↓	16% ↓	20%
30%-69%	7%	5%	8%	7%
70%-99%	9%	14% ↑	13% ↑	8%
100%	31%	30%	35% ↑	30%
Don't know	5%	8% ↑	5%	5%
Prefer not to say	14%	28% ↑	15%	13%
n=	4568	245	919	3404

%	10	20	30	40	50	60	70	80	90	100

Base: All respondentsG2: About what percentage of your company's current revenue comes from mobile apps?Note: Arrows denote comparison to small tier developers

We asked what percentage of their company's current revenue comes from mobile apps.

1/3 say that all of their revenue comes from mobile apps

PX- 2300.18

One-in-five say their company's revenue comes exclusively from iOS apps, with large tier developers less likely to source their revenue exclusively from iOS apps

Percent of Revenue from iOS Apps

	Total	Large	Mid	Small
0%	14%	3% ↓	7% ↓	18%
1%-29%	20%	14%↓	19%	21%
30%-69%	11%	16%↑	16% ↑	10%
70%-99%	12%	19%↑	16% ↑	10%
100%	21%	8% ↓	19% ↓	23%
Don't know	6%	9% ↑	6%	5%
Prefer not to say	15%	30% ↑	16% ↑	14%
n=	4560	244	917	3399

%	10	20	30	40	50	60	70	80	90	100

Base: All respondentsG3: About what percentage of your company's current revenue comes from iOS apps specifically?Note: Arrows denote comparison to small tier developers

1/3 say 70% or more of revenue comes specifically from iOS apps.
Small and mid-tier developers skew more towards iOS, which could be attributed to having less money and time to expand to other platforms

PX- 2300.19

16% say all of their company's expected revenue in 2015 will be from iOS apps

Percent of Revenue from iOS Apps in 2015

	Total	Large	Mid	Small
0%	11%	2% ↓	5% ↓	13%
1%-29%	20%	15% ↓	18% ↓	21%
30%-69%	15%	21% ↑	21% ↑	13%
70%-99%	14%	18% ↑	16% ↑	13%
100%	16%	5% ↓	15% ↓	18%
Don't know	10%	10%	11%	9%
Prefer not to say	14%	29% ↑	14%	12%
n=	4552	244	917	3391

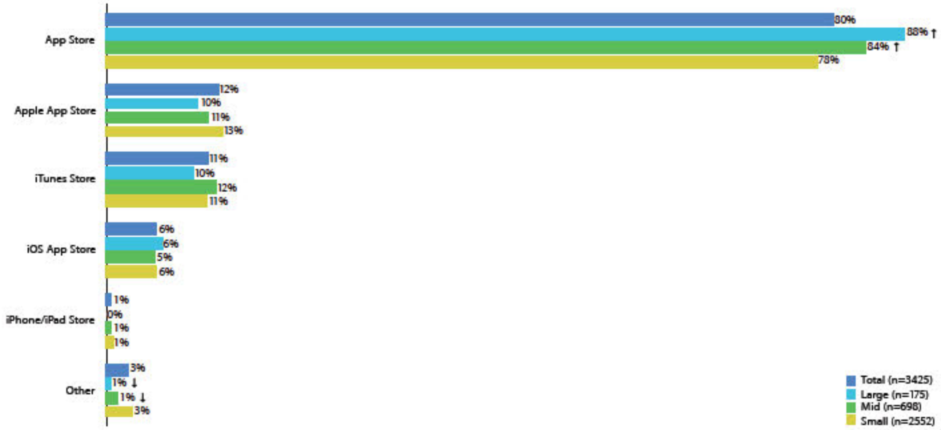
%	10	20	30	40	50	60	70	80	90	100

Base: All respondentsG4: About what percentage of your company's expected revenue in 2015 will come from iOS apps?Note: Arrows denote comparison to small tier developers

PX- 2300.20

80% of iOS developers correctly name the App Store

Name of (App Store)



Base: All respondentsA9: What do you call the store where customers can download iOS apps? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

APPLE CONFIDENTIAL X

We wanted to get sense of how developers refer to our brand unprompted, so we included a question "What do you call the store where customers can download iOS apps?" to gauge brand recognition.

80% of iOS developers correctly name the App Store and another 12% call it the Apple App Store, so we're in good shape.

PX- 2300.21

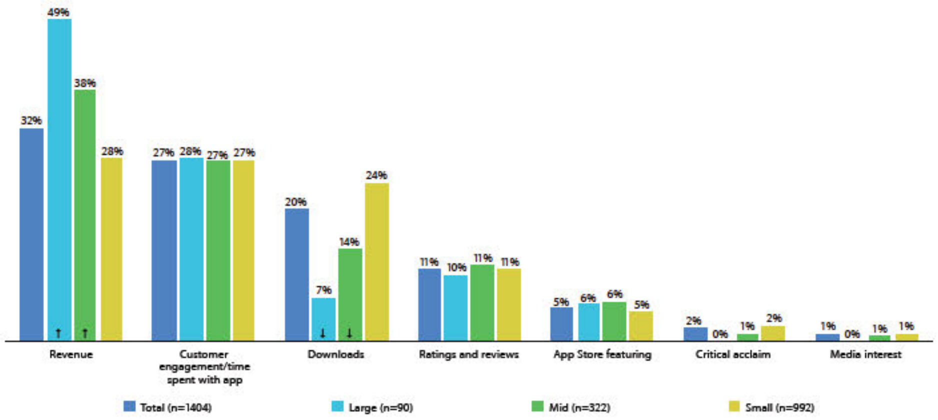
Business Profile

We spoke to both marketing and business contacts at each developer. Here's a look at what we heard from the business side.

PX- 2300.22

One-third say revenue is the most important measure of their apps' success, with large and mid tier developers more likely to emphasize revenue

Most Important Measure of iOS App Success



Base: Business respondentsB14: And which of these is most important in measuring your iOS apps' success?Note: Arrows denote comparison to small tier developers

APPLE CONFIDENTIAL 19

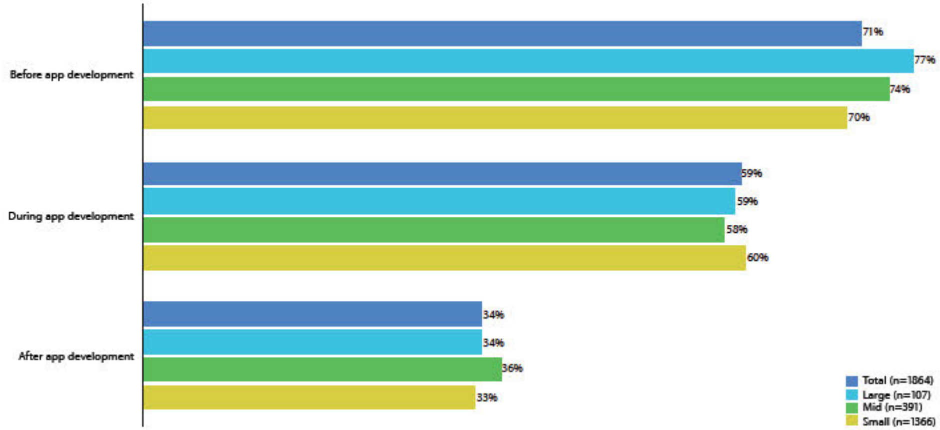
To get things started, we asked developers how they measure overall success on the App Store. Here developers could choose only one of the options presented to them.

- Of little surprise, revenue topped all choices at 32% overall, Revenue was especially key for large developers, coming in at just shy of 50%.
- Customer engagement/time spent was next, almost equally as important across large, medium and small developers.
- App store featuring scored low, but as we all know, featuring is usually a springboard to revenue, customer engagement and downloads, which all scored higher.

PX- 2300.23

Almost three-quarters of app developers start making business model decisions before starting app development, but one-third are still making decisions after the app has been developed

When Business Model Decided



Base: Business respondentsB1: When in the product lifecycle do you make decisions about your business model and pricing for your iOS apps? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

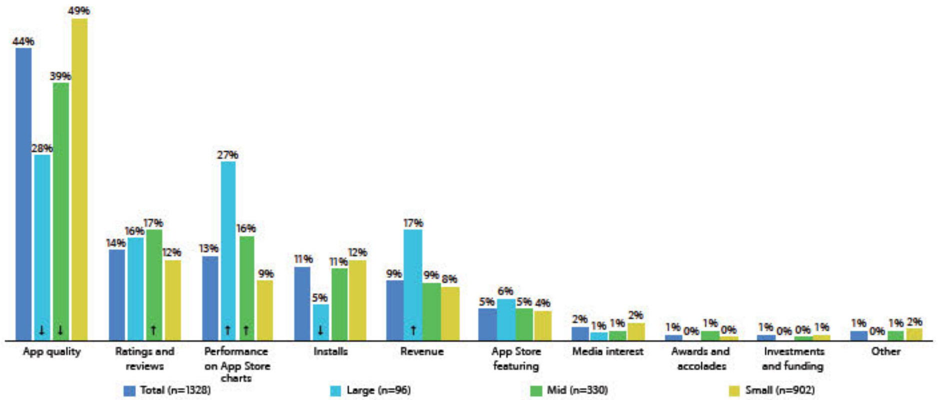
We then asked developers when in the product development cycle do they make their business-model decisions (multiple responses allowed)

- Much to our delight, just over 70% of all developers make those decisions before app development
- About 1/3 developers make those decisions after development of the app

PX- 2300.24

40% say app quality is their most important benchmark against competitors' apps

Most Important Benchmark of iOS apps versus Competitors



Base: Business respondentsB12: And which of these is most important in benchmarking your iOS apps against competitors?Note: Arrows denote comparison to small tier developers

APPLE CONFIDENTIAL 21

We then asked how devs benchmark their apps against the competition
they were only allowed on response here.
-when looking at how developers benchmark their apps against competition, 44% look at app quality.
- large developers benchmark evenly for app quality and performance on app store charts
- surprisingly, featuring came in at only about 5% across all tiers.

PX- 2300.25

Large and mid tier developers are more likely to plan app updates around Apple's calendar (iOS updates, product launches, App Store refresh, App Store promotions) and seasons

Events App Updates Planned Around

	Total	Large	Mid	Small
iOS updates	57%	76% ↑	64% ↑	53%
Apple product launches	27%	50% ↑	34% ↑	22%
Seasonal (net)	26%	57% ↑	32% ↑	20%
Christmas/Hanukkah	15%	40% ↑	19% ↑	11%
App Store refresh on Thursdays	11%	37% ↑	15% ↑	7%
Thanksgiving/Black Friday	10%	24% ↑	15% ↑	6%
App Store promotions	9%	36% ↑	10% ↑	4%
Back to School	7%	13% ↑	8%	6%
Summer	7%	19% ↑	8% ↑	5%
New Year's Day	6%	15% ↑	5%	5%
Halloween	5%	21% ↑	6% ↑	3%
Spring	5%	12% ↑	6% ↑	3%
Winter	4%	17% ↑	5% ↑	3%
Valentine's Day	4%	18% ↑	5% ↑	2%
Fall	4%	11% ↑	5%	3%
July 4th	4%	15% ↑	3%	2%
Mother's Day	2%	7% ↑	3% ↑	1%
Father's Day	1%	4% ↑	2%	1%
Graduation	1%	1%	0%	1%
Earth Day	1%	2%	1%	1%
Other	10%	8%	11%	9%
I don't plan around a cycle	33%	9% ↓	24% ↓	38%
n=	1864	107	391	1366

%	10	20	30	40	50	60	70	80	90	100

Base: Business respondentsB10: Do you plan your app updates around the following? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

In terms of app updates, we asked developers if they planned updates around any of the listed events. Multiple selections were allowed here.

- Far and away, developers plan updates around updates that make to the iOS. Large developers especially plan around our updates. Developers clearly know that integrating new product features into their apps is the way to go.
- Apple product launches are also key, especially for Large and Mid tier devs.
- Interesting is the App Store Refresh. For large developers, this came in at 37%, but it falls dramatically down to 15% for Medium and 7% for Small. The same can be said for App Store Promotions (36% – 10%% – 4%) – it appears that the small developers likely are not aware of the benefits of releasing on these dates or haven't been working with Apple and thus haven't been guided to do so. **The App Store best practices documentation we are working on will help here.**
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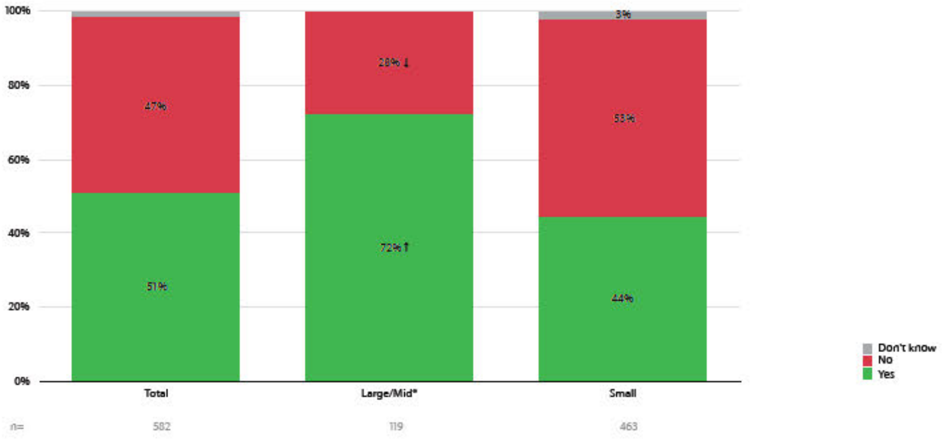
PX- 2300.26

Half of developers (but 72% of large/mid tier developers) conduct sales or price promotions for their paid apps

Conducts Sales or Price Promotions



Base: Business respondents who develop paid apps *Note: large and mid size developers combined due to small base sizes
B4: Do you conduct sales/price promotions for your paid apps?Note: Arrows denote comparison to small tier developers

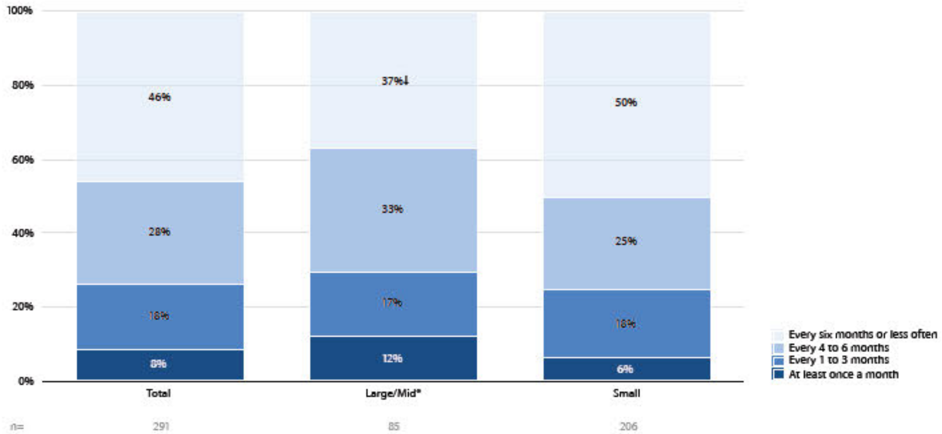
We then asked if they conduct sales or promotions for their paid apps? Due to the small response size, here we combined large/mid developers.

– Across the board, about half do. But as you can see, more than 70% of large/mid developers conduct price promotions, while only 44% of small developers do so.

PX- 2300.27

Just under half say they run sales or price promotions less than twice a year

Frequency of Sales or Price Promotions in Past Year



Base: Business respondents who conduct sales/promotions for paid apps *Note: large and mid size developers combined due to small base sizes
B5: In the past year, how often did you conduct sales/price promotions for your paid apps?Note: Arrows denote comparison to small tier developers

We then we asked how often they conduct price promos

- Over 50% of all developers run a price promotion at least once every six months.
- Large/mid tier developers conduct them more often, with 63% running a promo within six months vs. only 50% of small tier devs

PX- 2300.28

Large and mid tier developers are more likely to conduct seasonal sales, particularly around Thanksgiving, the winter holidays, and Back to School

Seasons Sales or Price Promotions Conducted

	Total	Large/ Mid*	Small
Conduct seasonal sales/ price promotions (net)	62%	78% ↑	55%
Thanksgiving/Black Friday	33%	47% ↑	27%
Christmas/Hanukkah	29%	40% ↑	23%
Back to School	21%	33% ↑	16%
Summer	11%	17% ↑	9%
New Year's Day	11%	17% ↑	8%
July 4th	10%	18% ↑	5%
Spring	9%	15% ↑	6%
Halloween	7%	14% ↑	3%
Winter	5%	9%	4%
Fall	5%	9% ↑	3%
Valentine's Day	5%	9% ↑	3%
Mother's Day	3%	4%	2%
Father's Day	2%	4%	1%
Earth Day	2%	3%	1%
Graduation	1%	1%	1%
Other	9%	9%	10%
I do not conduct any seasonal sales/price promotions	38%	22% ↓	45%
n=	291	85	206

%	10	20	30	40	50	60	70	80	90	100

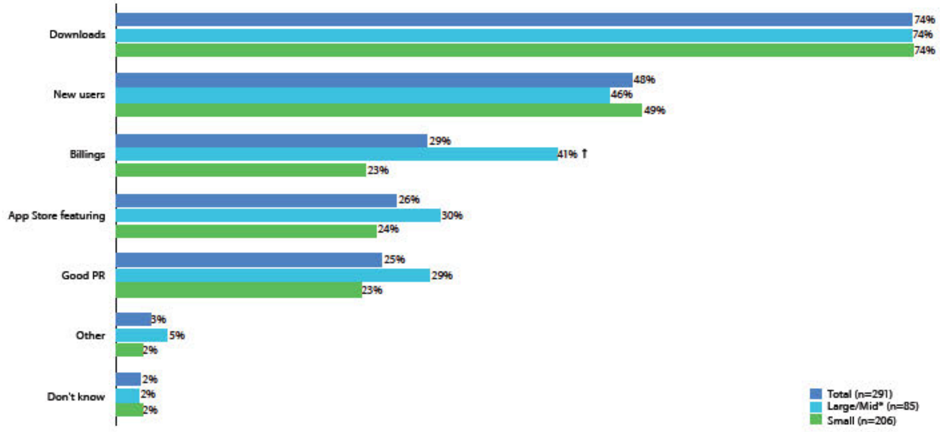
Base: Business respondents who conduct sales/promotions for paid apps *Note: large and mid size developers combined due to small base sizes
B6: Do you conduct any sales/price promotions during the seasons listed below? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

So, we wanted to find out when they conducted these promotions. Again, multiple response allowed.

- By scanning the list from top-to-bottom, you see that large/mid tier developers conduct sales more often that small developers around every event other than “other”
- As a whole, developers follow very similar price promotion cycles as traditional brick and mortar: 1) Thanksgiving/black Friday, 2) Christmas/Hanukkah, 3) back to school
- As you can see, large and mid tier developers are more willing to experiment with pricing and are more nimble in trying different pricing approaches.

The number of downloads is the most common measure of success for a sales or price promotion

Measures of Success of Sale or Price Promotion



Base: Business respondents who conduct sales/promotions for paid apps *Note: large and mid size developers combined due to small base sizes
B8: How do you measure the success of a sale/price promotion? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

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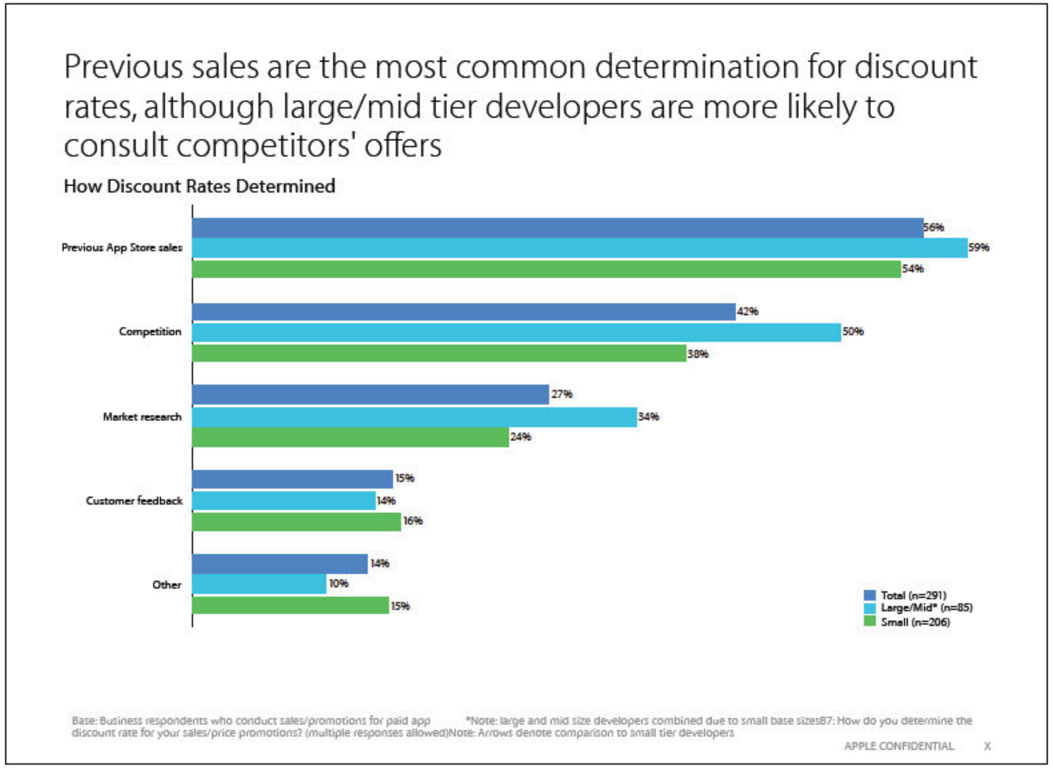
Finally, we wanted to hear how developers measure success from a sale or promotion (Again, multiple responses were allowed)

- Here the clear winner is Downloads at 74% across the board, evenly split across all tiers.
- Once again, top/mid developers are more focused on revenue/billings: 41% of large/mid developers derive success from billings while only 23% of small developers do.
- Acquiring new users very important as well.
- Featuring more important here than on previous questions, but still only about 26%. The increase here should come as no surprise as they'd love our help if they're lowering their prices.

PX- 2300.30



how do they determine the rates of the discounts?
history helps judge how to price
large/mid devs are much more concerned with competition pricing

PX- 2300.31

Three quarters use social media to market sales or price promotions

Marketing Sales or Price Promotions

	Total	Large/Mid*	Small
Social media	73%	77%	72%
Product page metadata	46%	54%	43%
PR	29%	36%	26%
Paid marketing	25%	25%	25%
Cross-promotion	19%	30% ↑	14%
In-app marketing	10%	17% ↑	7%
Other	8%	10%	8%
Don't know	5%	3%	7%
n=	291	85	206

%	10	20	30	40	50	60	70	80	90	100

Base: Business respondents who conduct sales/promotions for paid apps *Note: large and mid size developers combined due to small base sizes
B9: How do you market these sales/price promotions? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

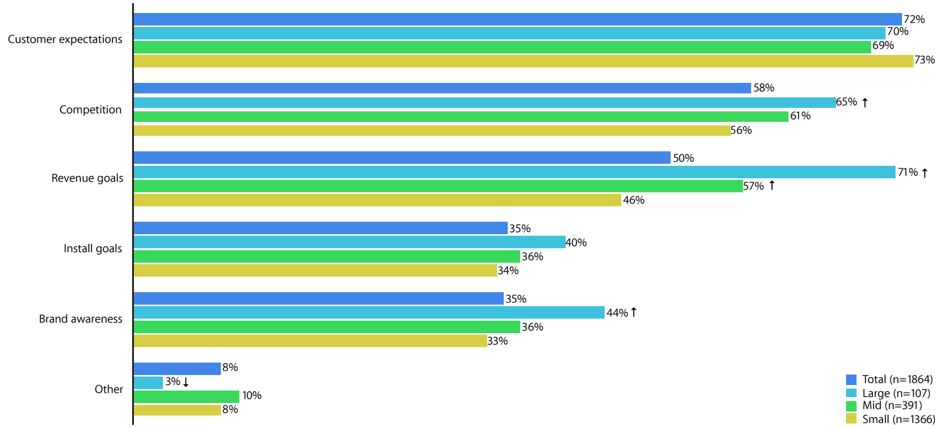
how do they market the sales? multiple responses allowed.

- social media far outweighs any other vehicles, with almost 3/4 using social media to promote their sales
- also utilized: product page metadata, paid marketing
- large/mid tier developers also utilized cross-promotion far more than small developers (by over 2:1)

PX- 2300.32

Three- quarters say customer expectations is an important factor in determining their business models

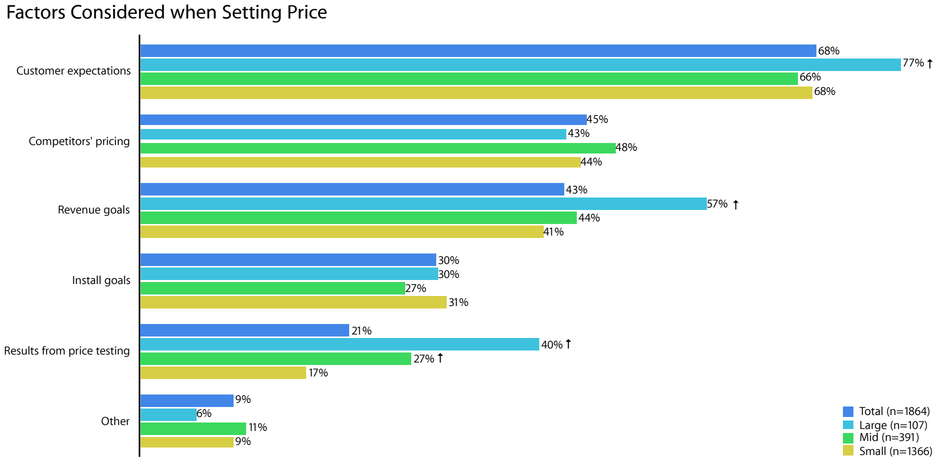
Factors Considered when Selecting Business Model



Base: Business respondentsB2: What factors do you consider when selecting the business model for your iOS apps? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

PX- 2300.33

Two-thirds also say customer expectations are important when setting prices

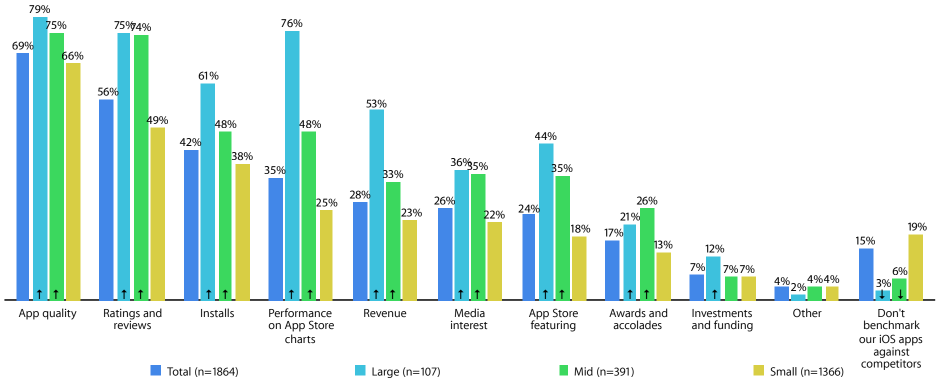


Base: Business respondentsB3: What factors do you consider when setting the price for your iOS apps or in-app purchases? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

PX- 2300.34

69% use app quality to benchmark their apps vs competitors; large and mid tier developers use more metrics

Benchmark of iOS Apps Against Competitors

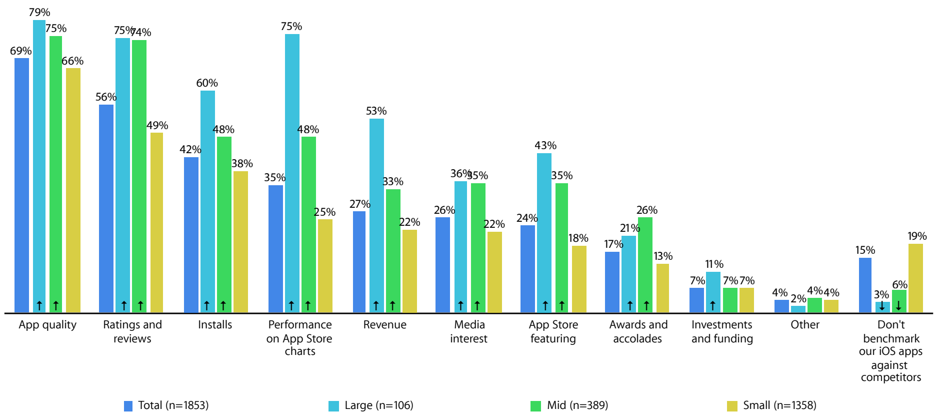


Base: Business respondentsB11: How do you benchmark your iOS apps against competitors? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

PX- 2300.35

69% use app quality to benchmark their apps vs competitors; large and mid tier developers use more metrics

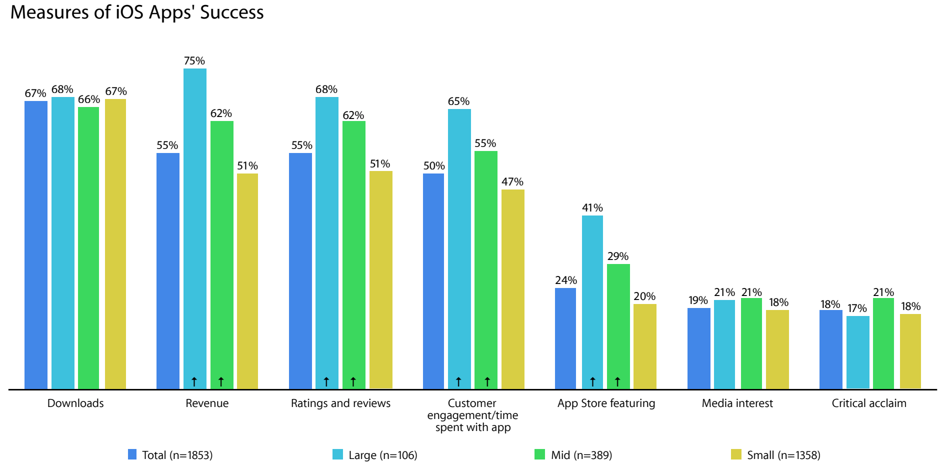
Benchmark of iOS Apps Against Competitors



Base: Business respondentsB11: How do you benchmark your iOS apps against competitors? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

PX- 2300.36

Downloads are the most common measure of iOS app success



Base: Business respondentsB13: How do you measure your iOS apps' success? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

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PX- 2300.37

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

APL-APPSTORE_09986623

Marketing Profile

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Here's a look at the profile of respondents who identified as marketing decision-makers

PX- 2300.38

Half say their marketing budget is between $1 and $10,000, while one-quarter of large tier developers have a marketing budget of $1million or more

Company's Mobile Apps Marketing Budget

	Total	Large	Mid	Small
$0	15%	3% ↓	8% ↓	17%
More than $0 but less than $10,000	51%	19% ↓	45% ↓	55%
$10,000 - $99,999	15%	19%	20% ↑	13%
$100,000-$999,999	6%	11% ↑	10% ↑	4%
$1,000,000 or more	3%	23% ↑	4% ↑	1%
Don't know	3%	11% ↑	2%	3%
Prefer not to say	8%	16% ↑	11% ↑	6%
n=	1687	75	330	1282

%	10	20	30	40	50	60	70	80	90	100

Base: Marketing respondents in the USF1: What is your company's annual marketing budget for mobile apps?Note: Arrows denote comparison to small tier developers

72% of small developers are operating on little or no marketing budget. 55% of small developer have budgets less than <$10K and 17% don't have a budget at all. This was an eye-opener for us. We need to equip developers with tools and guidance to leverage owned/influencer channels. This is top of mind for us as we build App Store best practices for Apple Developer and request features for iTC App Analytics. We need to innovate with more programs and tools to help developers with free marketing channels.

For large developers, 23% have budgets of over a million dollars.

[features requested: app referrer data and search keywords]

One-third say all of their mobile marketing budget is allocated to iOS

Percent of App Marketing Budget Allocated to iOS

	Total	Large	Mid	Small
0%	1%	1%	1%	1%
1%-29%	9%	6%	6% ↓	10%
30%-69%	20%	26%	19%	20%
70%-99%	17%	25% ↑	27% ↑	13%
100%	34%	17% ↓	31%	36%
Don't know	8%	11%	6%	8%
Prefer not to say	11%	14%	10%	11%
n=	1430	72	302	1056

%	10	20	30	40	50	60	70	80	90	100

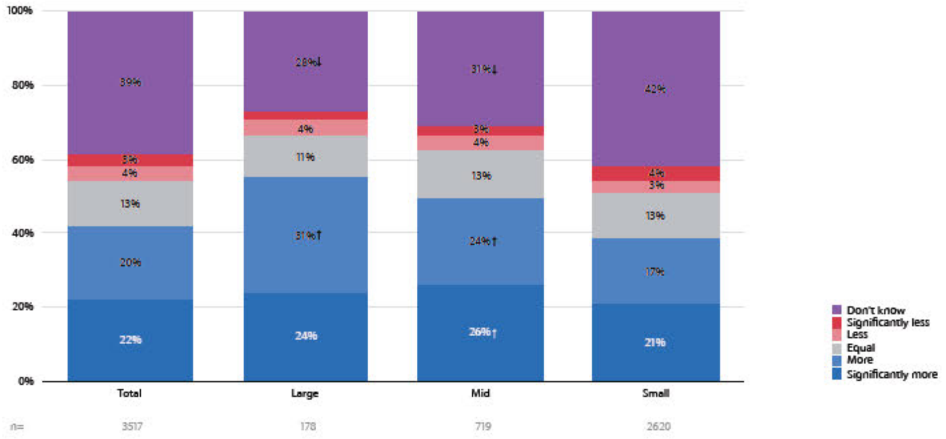
Base: Marketing budget is more than 0F2: About what percentage of your app marketing budget is allocated to iOS?Note: Arrows denote comparison to small tier developers

For those that do have a marketing budget, we wanted to find out what percentage of their app marketing budget is allocated to iOS. One third say their budget is 100% allocated to iOS.

PX- 2300.40

42% say iOS users have a higher relative LTV than users of other platforms, with large/ mid tier developers ranking iOS LTV higher

LTV of iOS Users vs. Other Platforms



Base: All respondentsG5: What is the relative lifetime value (LTV) of users from iOS versus other platforms?Note: Arrows denote comparison to small tier developers

Large and mid-tier developers particularly ranked the relative lifetime value of iOS users higher than users on other platforms. This is consistent with industry data that was shared at GDC: that when comparing iOS to Android, iOS makes 65% of money to Android's 35%. For the App Store, this supports our guidelines to lead with iOS in marketing plans and creative.

PX- 2300.41

Half say word of mouth is the most effective marketing channel; large and mid tier developers are much more likely to credit App Store featuring and cross promotion

Three Most Effective Marketing Channels

	Total	Large	Mid	Small
Word of mouth	50%	35% ↓	39% ↓	55%
Social media community	37%	21% ↓	25% ↓	41%
App Store featuring	24%	61% ↑	37% ↑	17%
Influencers	22%	13% ↓	25%	22%
Email	20%	20%	18%	21%
Social media advertising	20%	16%	21%	20%
PR	16%	13%	18%	15%
Cross promotion in your other apps	15%	37% ↑	25% ↑	10%
Communities	14%	9%	12%	14%
Other	11%	15%	13%	11%
Ad network advertising	9%	13% ↑	12% ↑	7%
Forums	5%	0%	2% ↓	7%
Push notifications	5%	7%	7%	5%
Cross promotion or advertising in other developers' apps	5%	8% ↑	7% ↑	4%
In-app messaging	3%	11% ↑	6% ↑	2%
n=	1692	75	330	1287

%	10	20	30	40	50	60	70	80	90	100

Base: Marketing respondentsC1: Which are the top three most effective marketing channels in driving downloads of your apps on the App Store? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

We asked developers what their top three most effective marketing channels were for driving downloads of their apps on the App Store. Word of mouth ranked as an important marketing channel, particularly for small developers. So again, we need to better equip developers with guidance for leveraging word of mouth and other free or low-cost marketing tactics. Large and mid-tier developers were more likely to credit App Store featuring as an effective driver of downloads.

PX- 2300.42

71% regularly use Facebook; large and mid tier developers use more ad networks

Ad Networks Regularly Used

	Total	Large/Mid*	Small
Facebook	71%	73%	69%
Admob/AdWords	41%	46%	37%
Twitter	25%	22%	27%
iAd	19%	20%	18%
Chartboost	15%	21% ↑	11%
Tapjoy	11%	19%	6%
Flurry	11%	15% ↑	9%
AdColony	10%	22% ↑	2%
Applovin	8%	15% ↑	4%
Fiksu	7%	14%	3%
Millennial Media	6%	11%	3%
Revmob	6%	7%	5%
Vungle	6%	16%	0%
PlayHaven	4%	8% ↑	2%
Applift	3%	7%	1%
Mopub	3%	7%	0%
Jumptap	2%	6%	0%
Inmobi	2%	3%	2%
Taptica	2%	6%	0%
Leadbolt	2%	5%	0%
Glispa	1%	3%	0%
Other	15%	18%	14%
n=	143	49+	94

%	10	20	30	40	50	60	70	80	90	100

Base: Ad networks in top three effective channels +Caution: small base. *Note: large and mid size developers combined due to small base sizesC2: Which ad networks do you use regularly to drive paid downloads for your iOS app? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

For respondents in the previous question who indicated that they used ad networks, we wanted to learn which ad networks were most used, with multiple responses allowed. For this question, the results for large and mid were combined due to small base sizes.

Facebook is by far the most used ad network.

We also got deeper into what type of ad units developers use, so for those who are interested in learning more about that, reach out and I can share details.

PX- 2300.43

Banner ad units are the type used most regularly

Ad Unit Types Regularly Used

	Total	Large/Mid*	Small
Banner	70%	81% ↑	64%
Social network	50%	51%	50%
Interstitial	30%	40%	23%
Incentivized downloads	14%	18%	12%
Video	13%	18% ↑	10%
Free daily deal app	5%	4%	5%
Television	4%	9%	1%
Print	2%	2%	2%
Other	7%	9%	5%
n=	143	49+	94

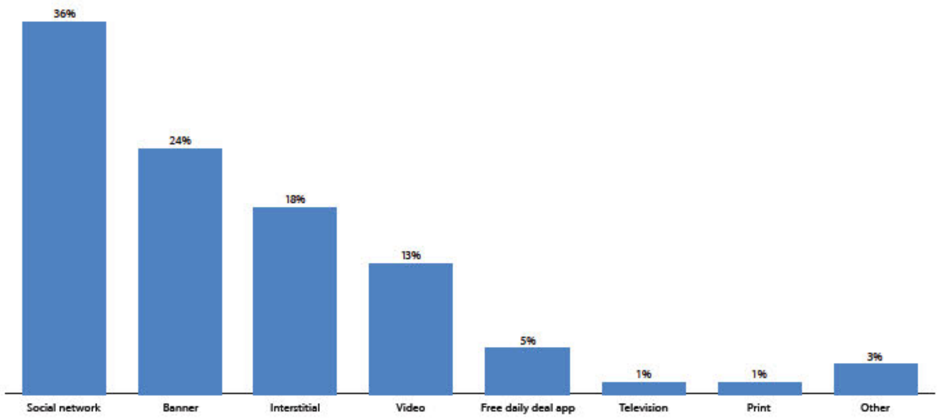
%	10	20	30	40	50	60	70	80	90	100

Base: Ad networks in top three effective channels +Caution: small base *Note: large and mid size developers combined due to small base sizes
C3: What types of ad units do you use regularly to drive downloads for your iOS app? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

PX- 2300.44

Just over one-third say social network ads are the most effective

Ad Unit Types Most Effective

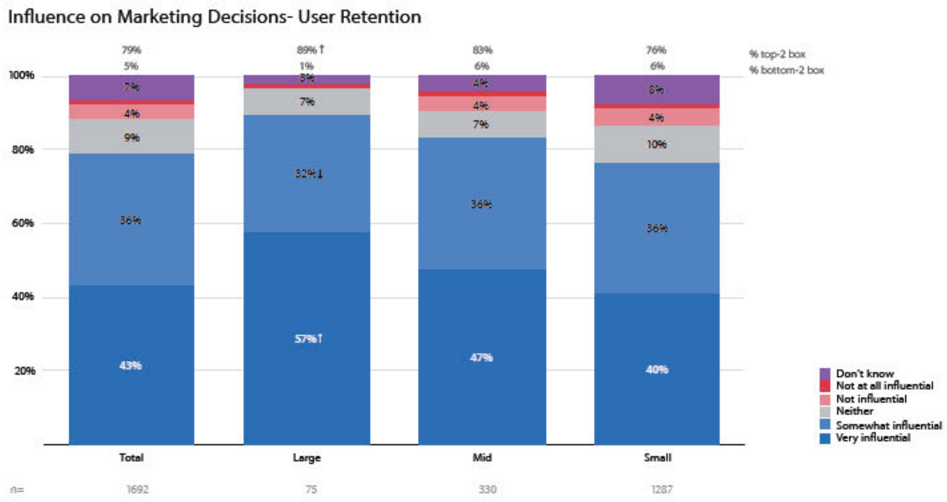


n=84

Base: Uses more than one type of ad unitC4: And which type of ad units do you think are most effective?

small base- shown in total

79% say user retention is an influential metric in marketing decisions



Base: Marketing respondentsC5: How would you rate the following metrics in terms of their influence on your marketing decisions?--User retentionNote: Arrows denote comparison to small tier developers

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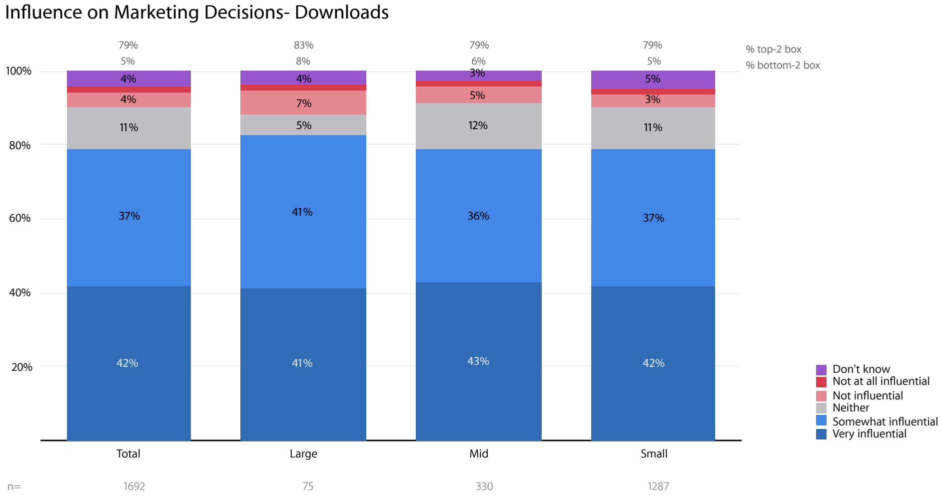
now looking at metrics that influence marketing decisions
1st...

PX- 2300.46

79% rate downloads as at least a somewhat influential metric in marketing decision-marking

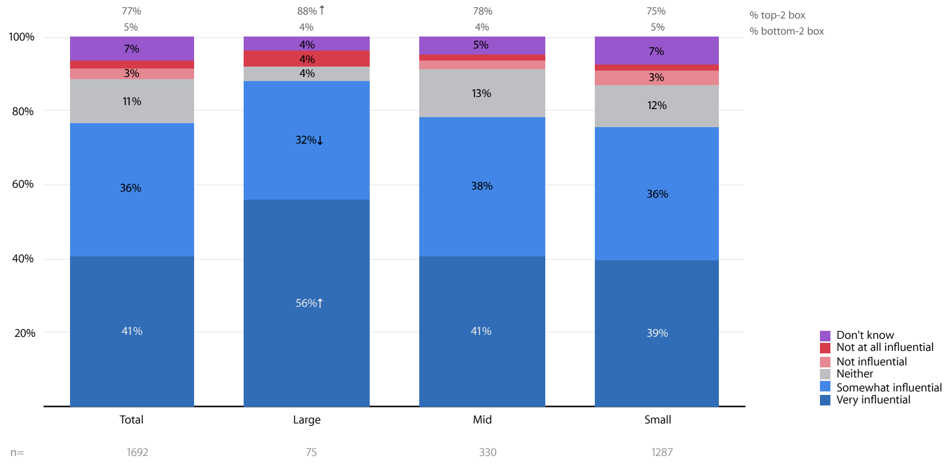


Base: Marketing respondentsC5: How would you rate the following metrics in terms of their influence on your marketing decisions?--DownloadsNote: Arrows denote comparison to small tier developers

PX- 2300.47

77% say unique users are at least somewhat influential in their marketing decisions

Influence on Marketing Decisions- Unique Users

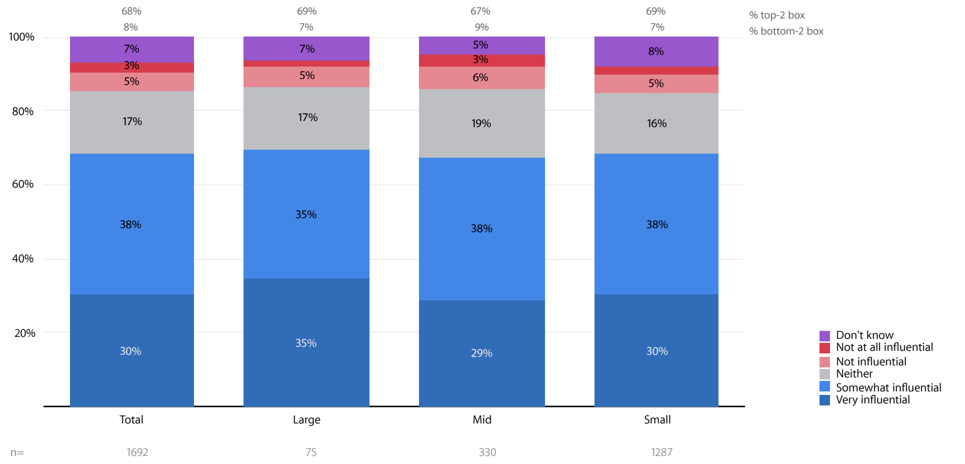


Base: Marketing respondentsC5: How would you rate the following metrics in terms of their influence on your marketing decisions?--Unique usersNote: Arrows denote comparison to small tier developers

PX- 2300.48

Two-thirds say the install rate is an influential metric in marketing decision making

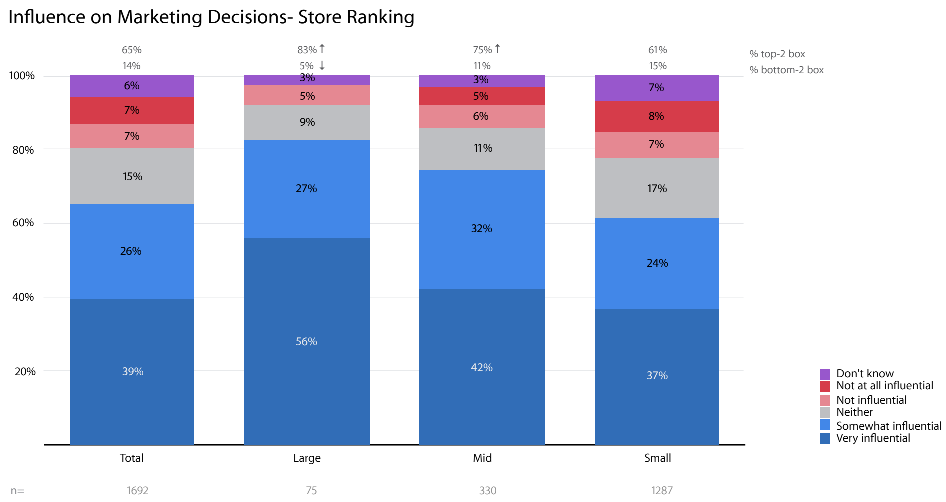
Influence on Marketing Decisions- Install Rate



Base: Marketing respondentsC5: How would you rate the following metrics in terms of their influence on your marketing decisions?--Install rateNote: Arrows denote comparison to small tier developers

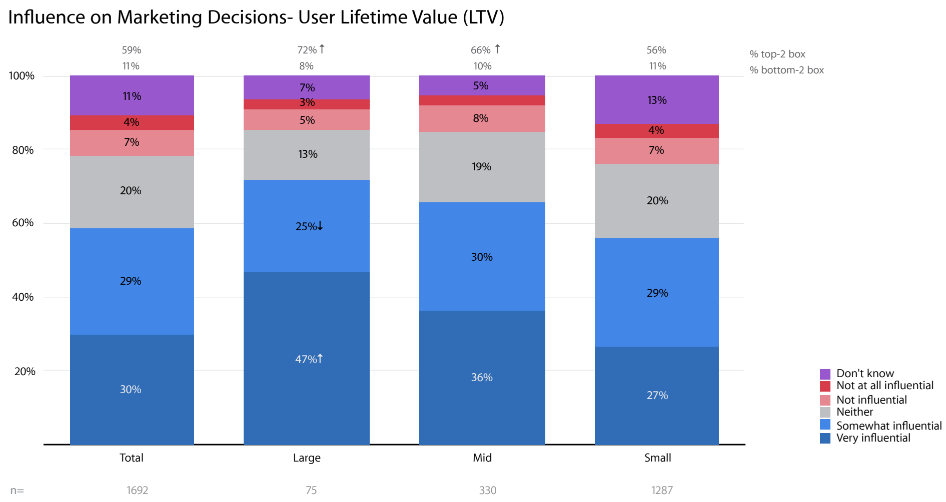
PX- 2300.49

Two-thirds say store rankings are influential in their marketing decisions



Base: Marketing respondentsC5: How would you rate the following metrics in terms of their influence on your marketing decisions?--Store RankingNote: Arrows denote comparison to small tier developers

59% say user LTV is an influential metric when making marketing decisions



Base: Marketing respondentsC5: How would you rate the following metrics in terms of their influence on your marketing decisions?--User lifetime value (LTV)Note: Arrows denote comparison to small tier developers

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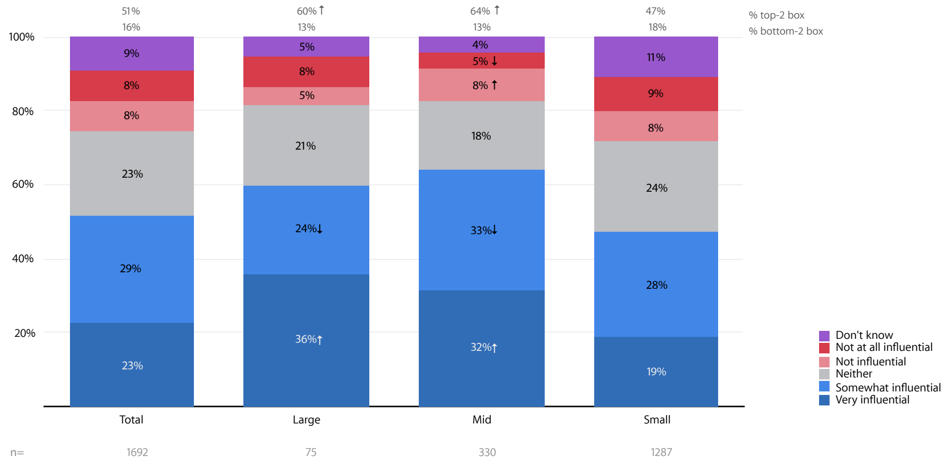
PX- 2300.51

Half say average revenue per user is an influential metric when making marketing decisions

Influence on Marketing Decisions- Average Revenue Per User (ARPU)

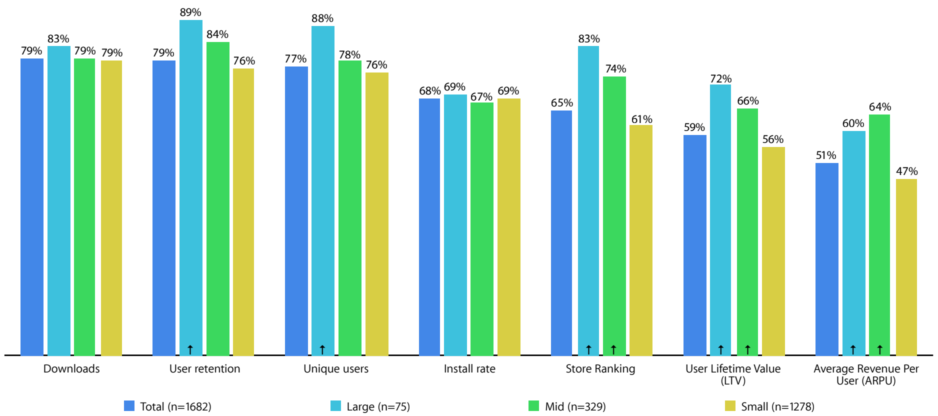


Base: Marketing respondentsC5: How would you rate the following metrics in terms of their influence on your marketing decisions?--Average Revenue Per User (ARPU)Note: Arrows denote comparison to small tier developers

PX- 2300.52

User retention, downloads and unique users are the most influential metrics in marketing decision making

Influence on Marketing Decisions (% top- 2 box)

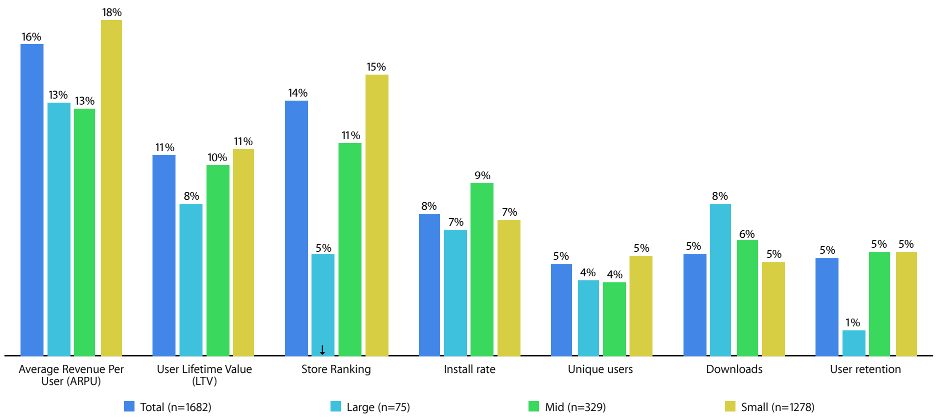


Base: Marketing respondentsC5: How would you rate the following metrics in terms of their influence on your marketing decisions?Note: Arrows denote comparison to small tier developers

PX- 2300.53

Average revenue per user and LTV are the least influential metrics in marketing decision making

Influence on Marketing Decisions (% bottom-2 box)



Base: Marketing respondentsC5: How would you rate the following metrics in terms of their influence on your marketing decisions?Note: Arrows denote comparison to small tier developers

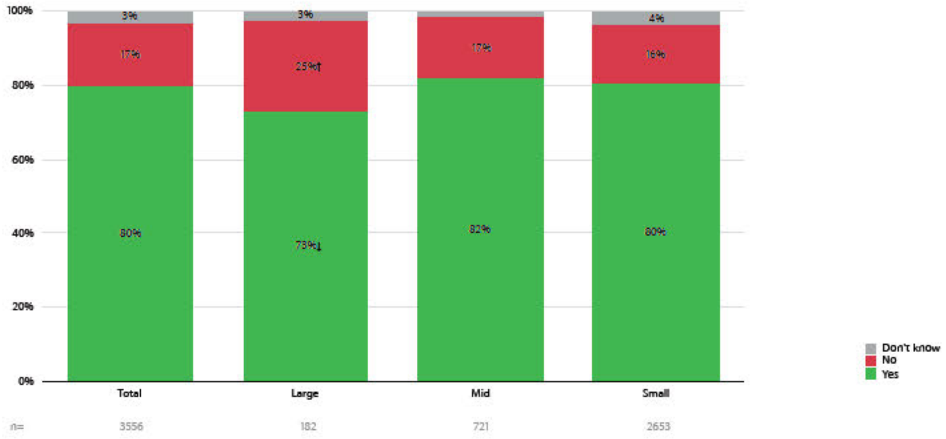
PX- 2300.54

Now let's look at how our US developers approach international markets

PX- 2300.55

80% say the majority of their iOS app business is domestic, with large developers more likely to have international users

Majority of iOS App Business is Domestic



Base: All respondentsE1: Does the majority of your iOS app business come from customers in your local country?Note: Arrows denote comparison to small tier developers

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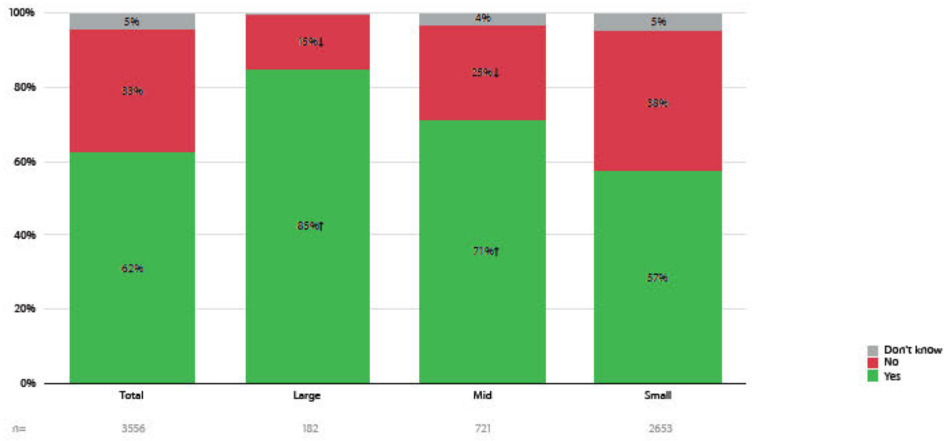
- of those we surveyed, 80% say the majority of their business is in the US.
- larger developers had more business outside the US

PX- 2300.56

62% have expanded their iOS app business internationally, with large and mid tier developers are more likely to have done so

Expanded iOS App Business Internationally



Base: All respondentsE2: Have you expanded your iOS app business internationally?Note: Arrows denote comparison to small tier developers

First, we wanted to simply see if our respondents had expanded their businesses internationally.

- Overall, 3/5 have expanded internationally.
- As we expected, this number was much higher for Large developers and dropped for Mid and then even lower for Small developers.
- All that said, it's good to see that each tier is above 50%.
- The years that we've spent championing the importance of international are clearly paying off.

PX- 2300.57

International sales reports and third-party research are the most common sources of information used when deciding which markets to enter

Resources Used to Determine International Markets to Enter

	Total	Large	Mid	Small
International sales reports	45%	60% ↑	56% ↑	41%
Third party research reports and services	36%	55% ↑	42% ↑	32%
Guidance from app platforms (net)	22%	26%	20%	23%
Apple	18%	20%	16%	19%
Google Play	9%	19% ↑	11% ↑	8%
Amazon	2%	4% ↑	2%	1%
Microsoft	2%	4% ↑	2%	1%
Blackberry	0%	1%	0%	0%
Other	24%	15% ↓	19% ↓	27%
n=	3556	182	721	2653

%	10	20	30	40	50	60	70	80	90	100

Base: All respondentsE3: What resources do you use to determine which international markets to enter? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

Next we wanted to see how developers determine which markets to go after?

- As we often guide developers in making these decisions, they review their international download/sales reports and target the countries where they're doing well.
- Secondly, look at research reports
- Finally, they also seek out guidance from their platform partners

PX- 2300.58

About one-quarter of apps developers use market research to market internationally

Services Used to Market Internationally

	Total	Large	Mid	Small
Market research	27%	37% ↑	30% ↑	25%
Local user acquisition channels	16%	31% ↑	18% ↑	13%
Creative localization service	13%	29% ↑	17% ↑	10%
Third-party publisher	7%	14% ↑	8%	6%
Local user acquisition agency	6%	14% ↑	7%	5%
Other	47%	29% ↓	41% ↓	50%
n=	3556	182	721	2653

%	10	20	30	40	50	60	70	80	90	100

Base: All respondentsE4: What services do you use to market internationally? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

How do they go about marketing internationally?

- Similar to the previous slide, a little over 1/4 use market research.
- Additionally, roughly 1/3 of large developers also use local user acquisition channels and creative localization services.
- Small developers are less likely to use local UA channels or creative localization services, and we believe it is because they don't know where to start or which partners to trust.

PX- 2300.59

Translation, lack of local expertise, and costs of localization are the most common barriers to new market entry

Barriers to New Market Entry

	Total	Large	Mid	Small
Capacity to translate apps	41%	41%	42%	41%
No expertise of market	39%	43%	39%	39%
High cost of localization	36%	37%	43% ↑	34%
Capacity to market locally	27%	38% ↑	29%	26%
Capacity to provide customer support	26%	27%	30% ↑	25%
Tax and legal considerations	14%	16%	14%	14%
Mobile adoption rates	12%	20% ↑	14% ↑	11%
No presence of publishing platform	11%	16% ↑	12%	10%
Local billing options are limited	4%	9% ↑	4%	3%
Local currency not accepted by storefront	2%	7% ↑	2%	2%
Other	16%	13%	14%	17%
n=	3556	182	721	2653

%	10	20	30	40	50	60	70	80	90	100

Base: All respondentsE5: Are there any barriers you face to enter new markets? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

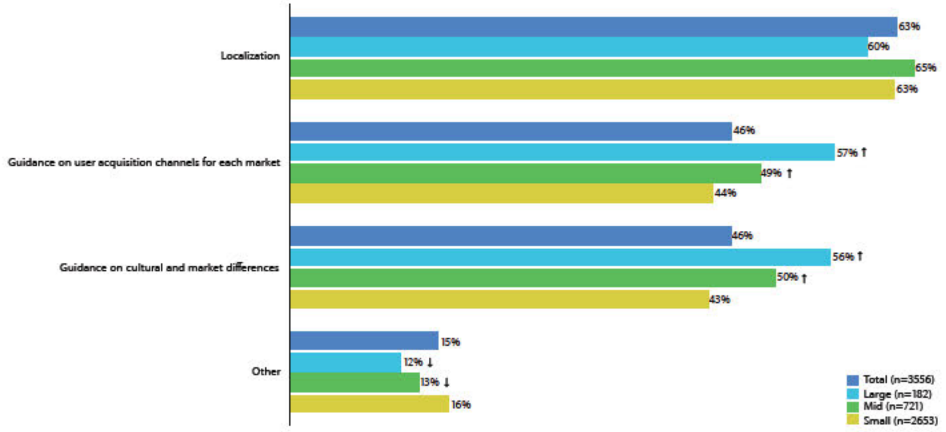
What are the barriers to entry in foreign markets:

- As expected, translation, lack of local expertise and costs of localization are the most common hurdles.

PX- 2300.60

63% want localization tools or guidance from the App Store to help market internationally

Tools Wanted from App Store for International Marketing



Base: All respondentsE6: What marketing tools or guidance would you like the App Store to provide to help you effectively market internationally? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

What can we on the App Store do to help on this front?

Consistent with the previous slide, developers are asking us to help localize, provide guidance on user acquisition channels and cultural and market differences. These are all areas the App Store is focusing on in the guidance we're creating on entering new markets.

Google is providing localization services at 3-5 cents per word, which, by industry standard, is cheap. We need to consider what services we can be offering.

PX- 2300.61

China, the UK, and Germany are the most frequently cited new countries to expand to

Top Countries To Expand

	Total	Large	Mid	Small
China	40%	54% ↑	47% ↑	36%
United Kingdom	38%	30% ↓	38%	38%
Germany	33%	36%	35%	32%
Japan	31%	39% ↑	35% ↑	29%
United States	30%	20% ↓	27% ↓	32%
France	27%	31%	27%	26%
Canada	25%	25%	25%	25%
Australia	23%	22%	23%	23%
Brazil	20%	28% ↑	24% ↑	18%
Mexico	18%	14%	19%	18%
India	18%	20%	18%	17%
Spain	16%	14%	20% ↑	16%
Italy	16%	15%	18%	16%
None of these	15%	15%	14%	15%
n=	3556	182	721	2653

%	10	20	30	40	50	60	70	80	90	100

Base: All respondentsE7: What are the top countries in which you'd like to expand your business internationally? (multiple responses allowed)Note: Arrows denote comparison to small tier developers; Countries with less than 20% suppressed

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And geographically, where are developers looking to expand?

- No big surprises here as they're focused on the top global markets: china (2), uk, germany (4) and japan
- Interesting to see that the large developers skew lower in the UK and US and higher in China and Japan. Given their maturity in the app space, they're likely further ahead in terms of localizations than smaller developers.

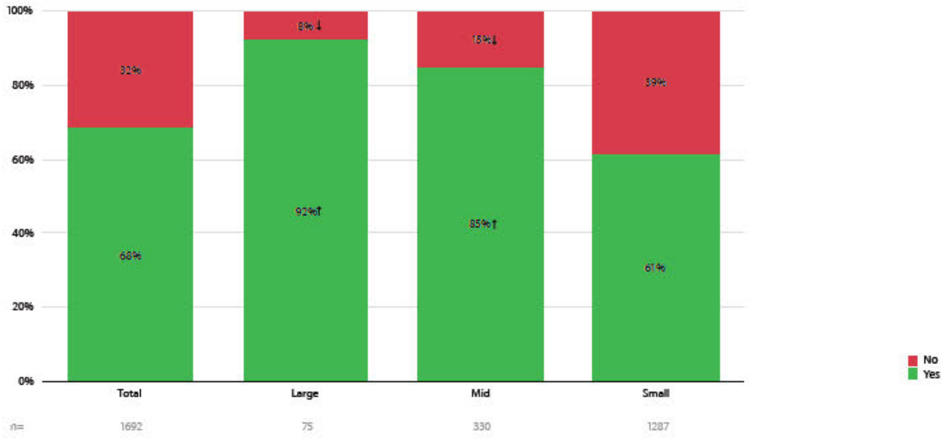
PX- 2300.62

Analytics tools

We wanted to understand which developers are using analytics tools and what tools they use.

68% (92% of large and 85% of mid tier developers) use third-party analytic tools

Uses Third-Party Analytics



Base: All respondentsC6: Do you use third-party analytic tools?Note: Arrows denote comparison to small tier developers

We began by asking all respondents if they use third-party analytics tools. 68% do, with 92% of large and 85% of mid tier developers using them.

So we wanted to know which tools they used to make decisions about:
- business models
- new market expansion
- acquisition marketing
- and engagement marketing

36% of those who use third-party analytic tools use Google Analytics for business model development

Third-Party Analytics Tools Used for Business Model

	Total	Large	Mid	Small
Google Analytics	36%	35%	33%	38%
Flurry Analytics	24%	26%	33% ↑	20%
Mixpanel	10%	14% ↑	11%	8%
Localytics	3%	10% ↑	2%	3%
AppsFlyer	1%	3%	2%	1%
HasOffers/Tune	1%	3%	1%	0%
Other	14%	17%	12%	14%
None of these	28%	17%	25%	30%
n=	1139	69	279	791

%	10	20	30	40	50	60	70	80	90	100

Base: Uses third party analytic toolsC7: What analytics tools do you use to make decisions about the following aspects of your business? (multiple responses allowed)—Business model
Note: Arrows denote comparison to small tier developers

Google Analytics is the most common analytics tool used across the board. For business development, 36% use Google.

28% indicated they did not use any of the companies listed and did not specify “other”, which may indicate the use of internal analytics tools.

34% of those who use third-party analytic tools use Google Analytics for user acquisition marketing

Third-Party Analytics Tools Used for User Acquisition Marketing

	Total	Large	Mid	Small
Google Analytics	34%	30%	26% ↓	37%
Flurry Analytics	20%	19%	22%	19%
Mixpanel	8%	9%	9%	7%
Localytics	3%	9% ↑	3%	3%
AppsFlyer	2%	4%	2%	2%
HasOffers/Tune	3%	7% ↑	5% ↑	1%
Adjust	1%	3%	2%	1%
Apsalar	1%	3%	1%	1%
Kochava	2%	3%	5%	0%
Ad-X	1%	6%	2%	0%
Other	14%	14%	10%	15%
None of these	33%	28%	36%	33%
n=	1139	69	279	791

%	10	20	30	40	50	60	70	80	90	100

Base: Uses third party analytic toolsC7: What analytics tools do you use to make decisions about the following aspects of your business? (multiple responses allowed)—User acquisition marketingNote: Arrows denote comparison to small tier developers

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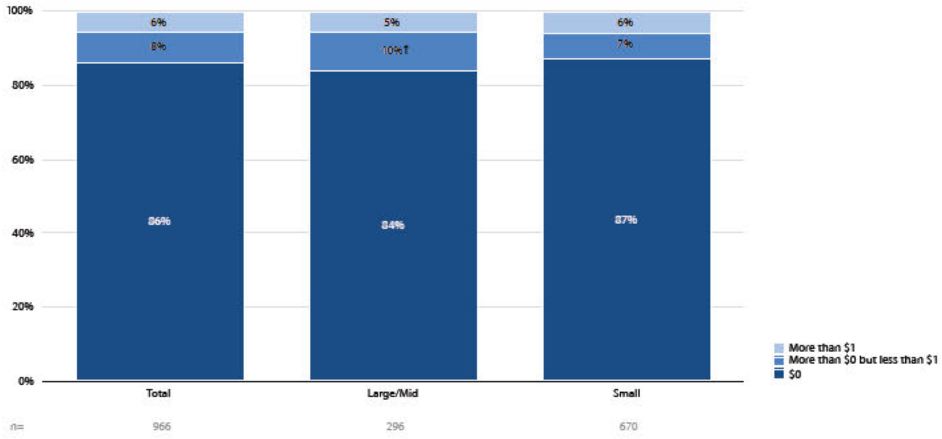
34% use Google Analytics for user acquisition analytics.

Similarly, around an third indicated they did not use any of the companies listed and did not specify “other”.

PX- 2300.66

Most developers who use analytics tools for user acquisition marketing don't pay anything

Total Cost of Analytics Tools Uses for User Acquisition Marketing (Cost per Install)



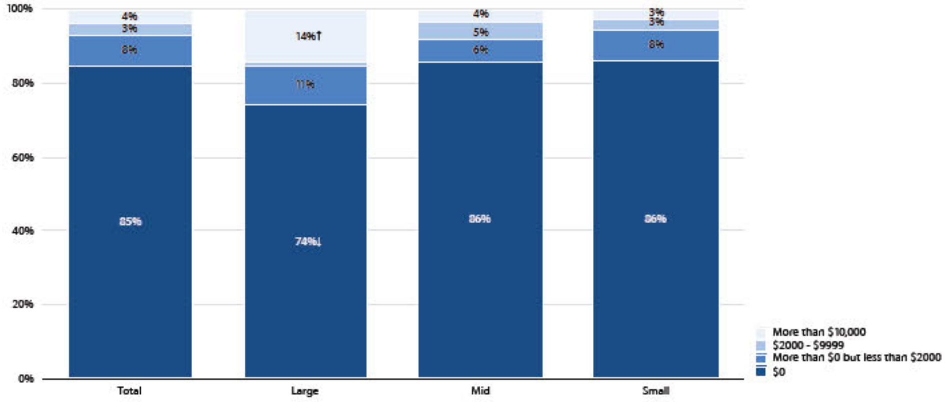
Base: Uses analytic tools for user acquisitionC8: What is the total cost of the analytics tool(s) you use for user acquisition marketing?--Average cost per installNote: Note: Arrows denote comparison to small tier developers

For UA, developers either measure cost by install or the cost annually, so we wanted to get a sense for both. This slide shows cost per install, and as you can see, 86% of developers don't pay anything for their UA. This could be because the analytics tool provider uses the developers' data for its own purposes and is therefore able to offer their services at no cost.

[e.g., providing a multi-purpose SDK that tracks UA and also delivers ads]

Most developers who use analytics tools for user acquisition marketing don't pay anything

Total Cost of Analytics Tools Uses for User Acquisition Marketing (Cost per Year)



n= 969 75 223 671

Base: Uses analytic tools for user acquisitionC8: What is the total cost of the analytics tool(s) you use for user acquisition marketing?--Average cost per yearNote: Note: Arrows denote comparison to small tier developers

The average cost per year for UA tools is consistent with the previous slide, with 85% of developers not paying anything for UA.
14% of large developers spend more than $10K annually

PX- 2300.68

34% of those who use third-party analytic tools use Google Analytics for engagement marketing

Third-Party Analytics Tools Used for Engagement Marketing

	Total	Large	Mid	Small
Google Analytics	34%	26% ↓	30% ↓	37%
Flurry Analytics	23%	14%	33% ↑	20%
Mixpanel	11%	13%	13%	10%
Localytics	4%	9% ↑	3%	4%
Other	14%	14%	10%	15%
None of these	31%	33%	29%	32%
n=	1139	69	279	791

%	10	20	30	40	50	60	70	80	90	100

Base: Uses third party analytic toolsC7: What analytics tools do you use to make decisions about the following aspects of your business? (multiple responses allowed)—Engagement marketingNote: Arrows denote comparison to small tier developers

For engagement marketing, 34% of developers use Google Analytics.

And again, around an third indicated they did not use any of the companies listed and did not specify “other”, so internal analytics tools could be the reason.

PX- 2300.69

58% don't use any analytic tools for new market expansion

Third-Party Analytics Tools used for Expansion to New Markets

	Total	Large	Mid	Small
Google Analytics	22%	19%	20%	24%
Flurry Analytics	11%	12%	15%↑	10%
Mixpanel	5%	4%	6%	4%
Localytics	2%	4% ↑	1%	1%
Other	9%	9%	8%	9%
None of these	58%	59%	57%	58%
n=	1139	69	279	791

%	10	20	30	40	50	60	70	80	90	100

Base: Uses third party analytic toolsC7: What analytics tools do you use to make decisions about the following aspects of your business? (multiple responses allowed)--Expansion to new marketsNote: Arrows denote comparison to small tier developers

PX- 2300.70

Next, we wanted to know if and how developers use the guidance and tools we provide to them. And if so, how helpful are they?

The most common resources used to research iOS app business decisions are industry news and blogs, and third party analytics research

Resources Used to Research iOS App Business Decisions

	Total	Large	Mid	Small
Industry news and blogs	60%	74% ↑	63%	58%
Third party app analytics research	59%	80% ↑	77% ↑	52%
~~Guidance from app platforms (net)~~	55%	65% ↑	63% ↑	52%
Google Play	21%	37% ↑	30% ↑	16%
Amazon	5%	16% ↑	8% ↑	3%
Microsoft	4%	8% ↑	5% ↑	3%
Blackberry	0%	1%	1%	0%
Other developers	46%	50%	50% ↑	44%
Experimenting with apps in your portfolio	44%	71% ↑	52% ↑	39%
Search engine research	35%	33%	29% ↓	37%
Experience from other digital goods and marketplaces	24%	36% ↑	26%	22%
Ad networks	17%	31% ↑	19% ↑	14%
Other	6%	2% ↓	6%	7%
n=	1864	107	391	1366

%	10	20	30	40	50	60	70	80	90	100

Base: Business respondentsD10: What resources do you use to research how to make iOS app business decisions? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

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did not include Apple for benchmarking – have corrected for future surveys

PX- 2300.72

Two-thirds use industry news and blogs when researching how to make app marketing decisions; large and mid tier developers use more resources

Resources Used to Research App Marketing Decisions

	Total	Large	Mid	Small
Industry news and blogs	65%	72% ↑	77% ↑	61%
Guidance from app platforms (net)	57%	63%	65% ↑	54%
Google Play	18%	25% ↑	24% ↑	16%
Amazon	4%	5%	6% ↑	4%
Microsoft	3%	8% ↑	3%	3%
Blackberry	1%	3% ↑	1%	1%
Third party app analytics research	53%	81% ↑	73% ↑	44%
Other developers	48%	48%	54% ↑	46%
Experimenting with apps in your portfolio	47%	63% ↑	56% ↑	43%
Search engine research	39%	33%	41%	39%
Ad networks	23%	32% ↑	29% ↑	20%
Experience from other digital goods and marketplaces	21%	32% ↑	22%	21%
Other	6%	4%	3% ↓	6%
n=	1692	75	330	1287

%	10	20	30	40	50	60	70	80	90	100

Base: Marketing respondentsD9: What resources do you use to research how to make app marketing decisions? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

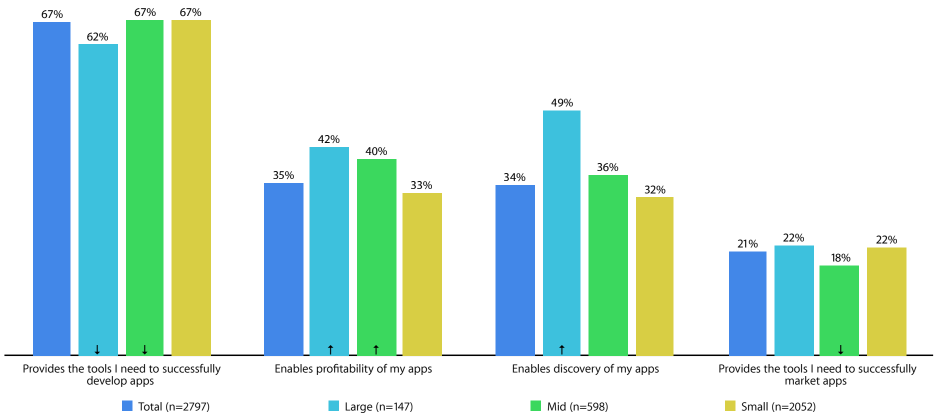
APPLE CONFIDENTIAL X

did not include Apple for benchmarking – have corrected for future surveys

PX- 2300.73

Summary of App Store

% Agreeing with statement (top-2 box)

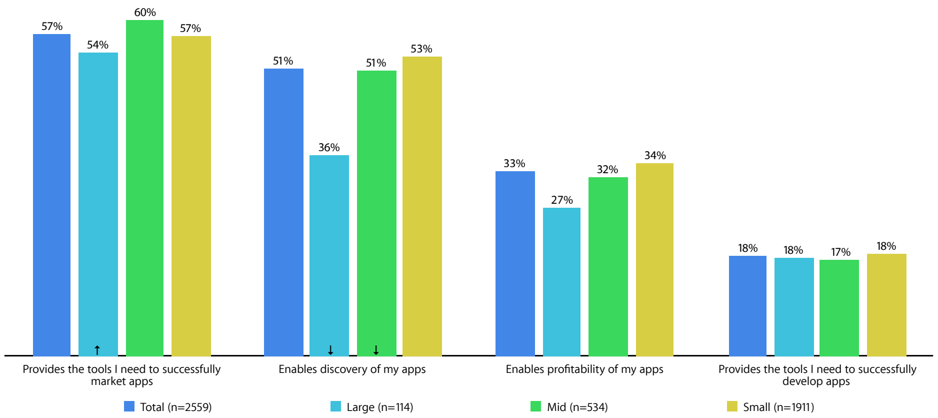


Base: All respondentsA10: How would you rate the App Store on the following?Note: Arrows denote comparison to small tier developers

PX- 2300.74

Summary of App Store

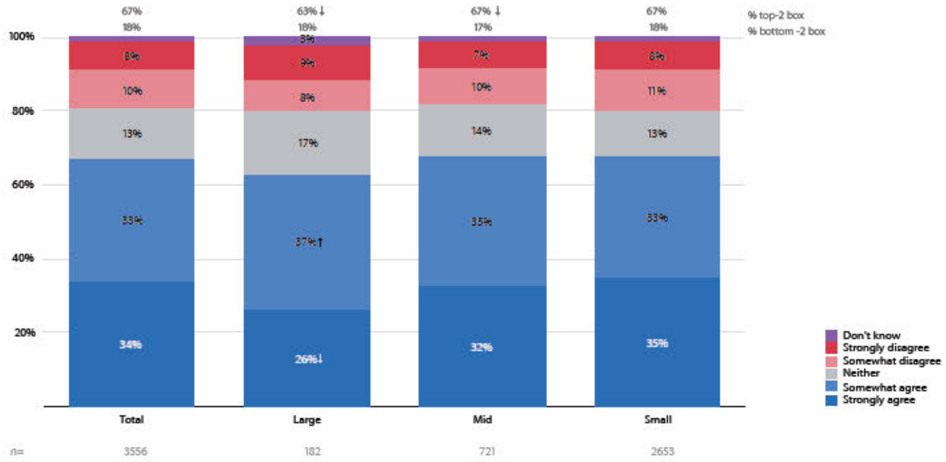
% Disagreeing with statement (% bottom-2 box)



Base: All respondentsA10: How would you rate the App Store on the following?Note: Arrows denote comparison to small tier developers

PX- 2300.75

2 in 3 developers agree that the App Store provides tools to successfully develop apps



Base: All respondentsA10: How would you rate the App Store on the following?--Provides the tools I need to successfully develop appsNote: Arrows denote comparison to small tier developers

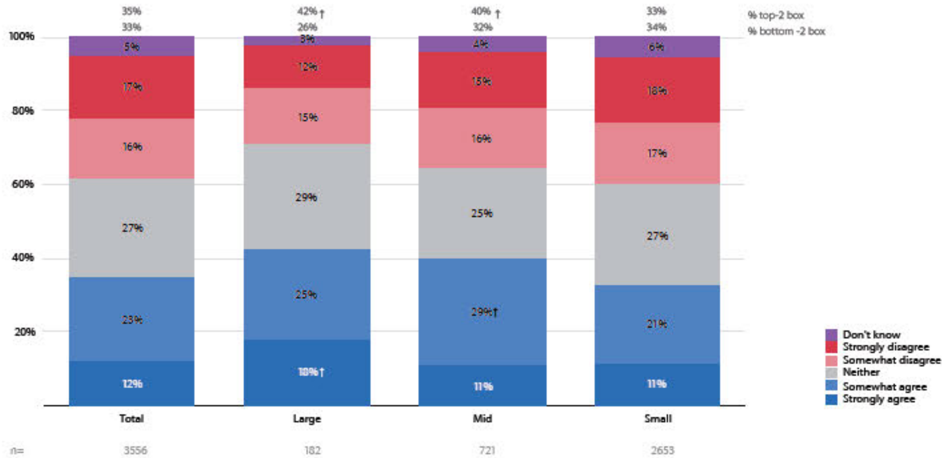
Here we asked developers about the tools that we provide and if they successfully help them to develop apps.

- Overall 2/3 either stated that they "Strongly" or "Somewhat agree" that we provide the tools they need to succeed. 18% fell in the negative camp.
- The numbers were pretty consistent across each tier.
- Generally speaking, developers are happy with the tools we provide.

PX- 2300.76

Only one-third agree that the App Store enables profitability of their apps

App Store Rating- Enables profitability of my apps

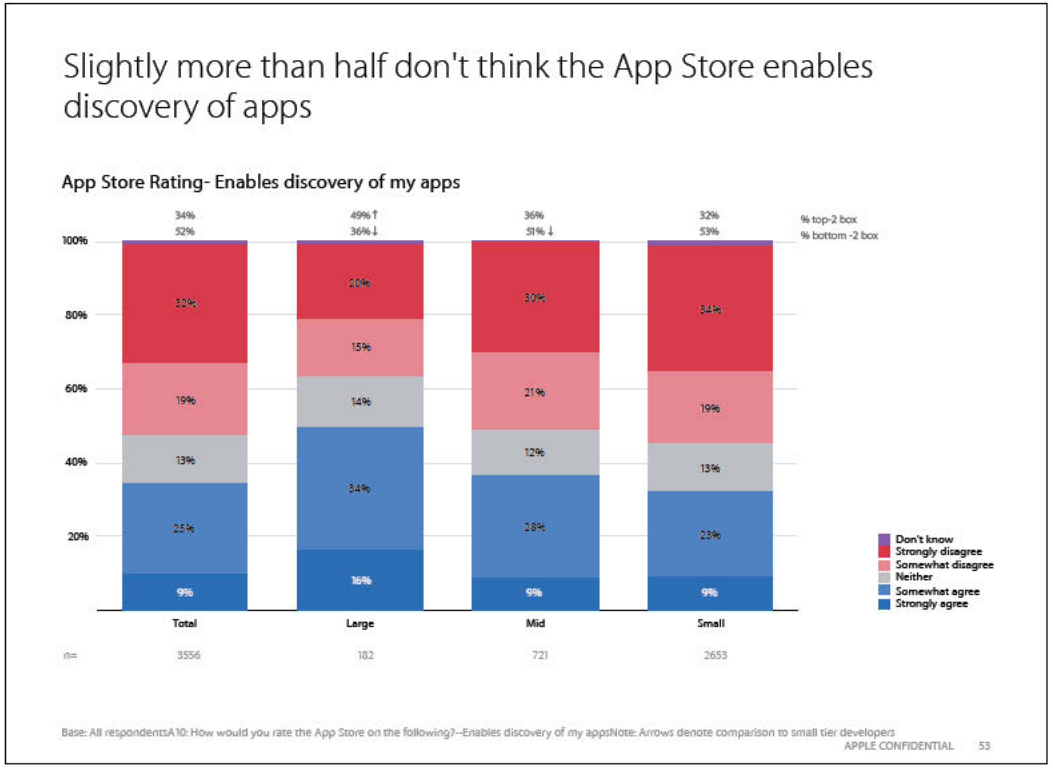


Base: All respondentsA10: How would you rate the App Store on the following?--Enables profitability of my apps Note: Arrows denote comparison to small tier developers

However, looking at whether the App Store enables profitability is another story.

- Overall, it's about evenly split between positive and negative. 35% either Strongly or Somewhat Agree that the App Store enables profitability while 33% either Strongly or Somewhat Disagree.
- Larger developers leaned more towards the positive while smaller developers, many of whom may not be in touch with the App Store, leaned slightly towards negative.
-

PX- 2300.77



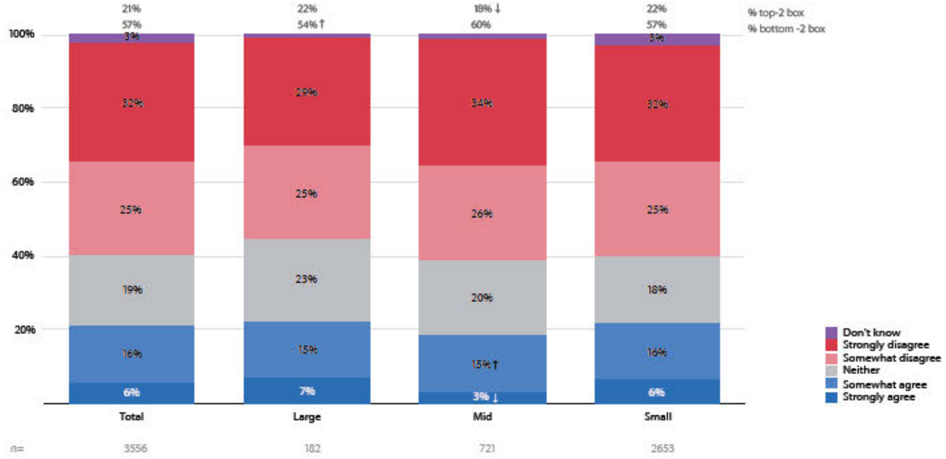
Now how about discoverability of apps…

- There is much more negative sentiment here.
- Overall, 34% Strongly or Somewhat agree that the App Store enables discoverability and more than 50% fell into Strongly Disagree or Somewhat Disagree, with 32% strongly disagreeing.
- The negative sentiment was worse among mid and small tier developers; however, it's clear that this is an issue across the board.
-

PX- 2300.78

57% don't agree that the App Store provides the tools needed to successfully market their apps

App Store Rating- Provides the tools I need to successfully market apps



Base: All respondentsA10: How would you rate the App Store on the following?--Provides the tools I need to successfully market apps Note: Arrows denote comparison to small tier developers

We asked to be rated on whether the App Store proves the tools developers need to successfully market apps, and 57% do not agree that this is the case.

We anticipate that iTC App Analytics and the App Store best practices we are creating for Apple Developer will help improve this rating in future surveys, but we need to be thinking about what more we can provide.

PX- 2300.79

Better analytics tools and discoverability are the business tools most requested by developers

Requested Business Tools

	Total	Large	Medium	Small
Analytics (net)	25%	35% ↑	29% ↑	23%
Better analytics tools	19%	27% ↑	23% ↑	17%
Data on downloads	9%	11%	10%	8%
Data on uninstalls	1%	3% ↑	1%	1%
Better sales data	1%	3%	1%	1%
Better discoverability	15%	12%	15%	15%
Marketing help	6%	6%	5%	7%
Better ratings and reviews	6%	8%	8% ↑	5%
Info on how to be a featured app	5%	2%	6%	5%
More information about approval	4%	2%	5%	4%
Information about revenue	4%	6%	4%	4%
Better testing	4%	9% ↑	5% ↑	3%
Better contacts with Apple	4%	2%	5%	3%
Faster approvals	3%	3%	3%	4%
Remove old apps	1%	0%	1%	1%
API submission	1%	1%	1%	1%
Other	7%	6%	6%	7%
No other needs	1%	0%	1%	2%
Not sure	2%	1%	1%	2%
Did not answer	38%	35%	38%	39%
n=	1853	106	389	1358

%	10	20	30	40	50	60	70	80	90	100

Base: Business respondentsD28: What other tools would you like the App Store to provide to help you make business decisions about your apps?Note: Arrows denote comparison to small developers

So we asked what tools could we provide to help developers make better business decisions

- Analytics far outdistanced any of the other options and were of most interest to larger developers, which shouldn't come as a surprise.
- Discoverability, which we've now seen come up a few times throughout the survey, came in next, with everything else falling in under 10%.

PX- 2300.80

Improved discoverability and more analytics tools are the most requested marketing tools

Requested Marketing Tools

	Total	Large	Medium	Small
Better discoverability	24%	27%	29% ↑	22%
Analytics (net)	17%	27% ↑	23% ↑	14%
Better analytics tools	11%	16% ↑	16% ↑	10%
Data on downloads	7%	15% ↑	11% ↑	6%
Data on uninstalls	1%	5% ↑	1%	1%
Info on how to be a featured app	8%	7%	11% ↑	7%
Better ratings and reviews	8%	5%	13% ↑	6%
Trials/demos of apps	4%	4%	6%	4%
Faster approvals	3%	3%	4%	3%
Better contacts with Apple	3%	4%	3%	3%
Information on users	3%	5%	3%	3%
More information about approval	3%	0%	4%	3%
Better testing	2%	5% ↑	3%	2%
Social networking support	2%	3%	1%	2%
Other	7%	9%	7%	7%
No other needs	1%	0%	1%	2%
Not sure	2%	0%	2%	3%
Did not answer	34%	29%	28% ↓	37%
n=	1682	75	329	1278

%	10	20	30	40	50	60	70	80	90	100

Base: Marketing respondentsD29: What other tools would you like the App Store to provide to help you effectively market your apps?Note: Arrows denote comparison to small tier developers

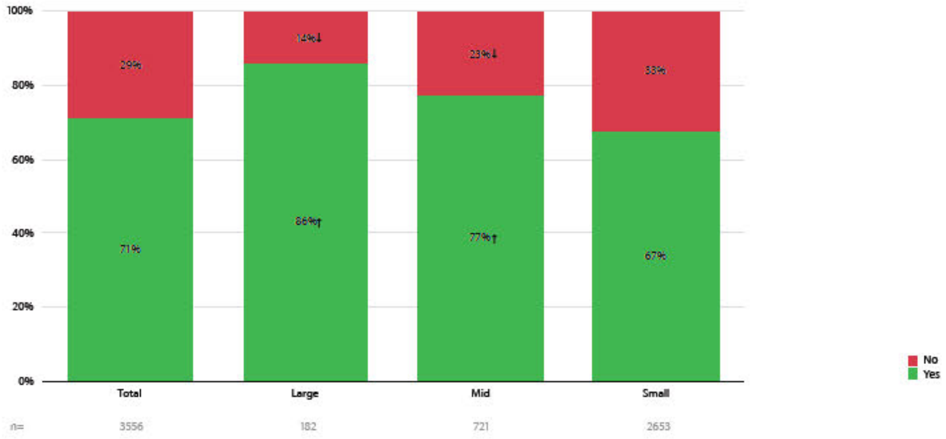
Similarly, among Marketing respondents, improved discoverability and more analytics tools are the most requested tools.

For discoverability, we are working with the Search team to provide more detailed App Store Optimization guidance. And iTC App Analytics will have a significant impact once its released.

PX- 2300.81

71% are aware of the App Store Marketing Guidelines, with higher awareness among large and mid tier developers

Aware of App Store Marketing Guidelines



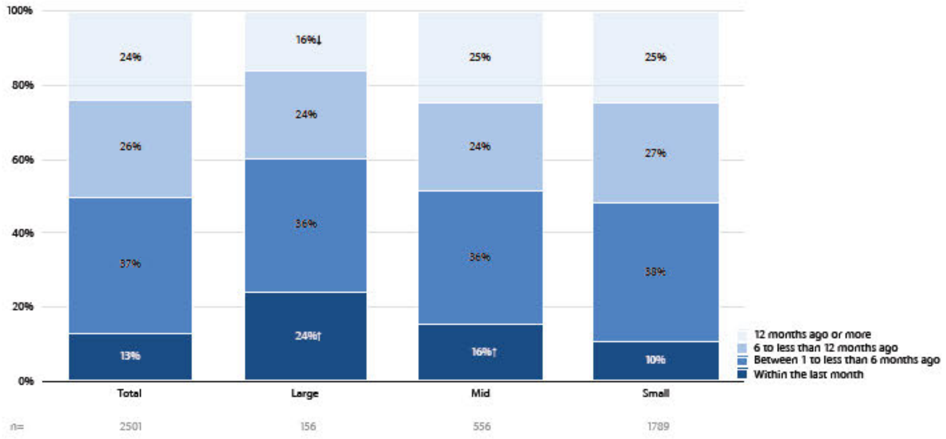
Base: All respondentsD11: Are you aware of the App Store Marketing Guidelines?Note: Arrows denote comparison to small tier developers

As you know, the App Store Marketing Guidelines provide developers with brand identity guidance, localized Download on the App Store badges, and the latest device images for their marketing purposes. We wanted to find out whether developers were aware of the guidelines and how regularly they used them. Overall, 71% of developers are aware of them. 86% of large, 77% of mid, and 67% of small developers.

PX- 2300.82

75% have visited the App Store Marketing Guidelines within the past year, with large and mid tier developers visiting more recently

Last Visited App Store Marketing Guidelines Page



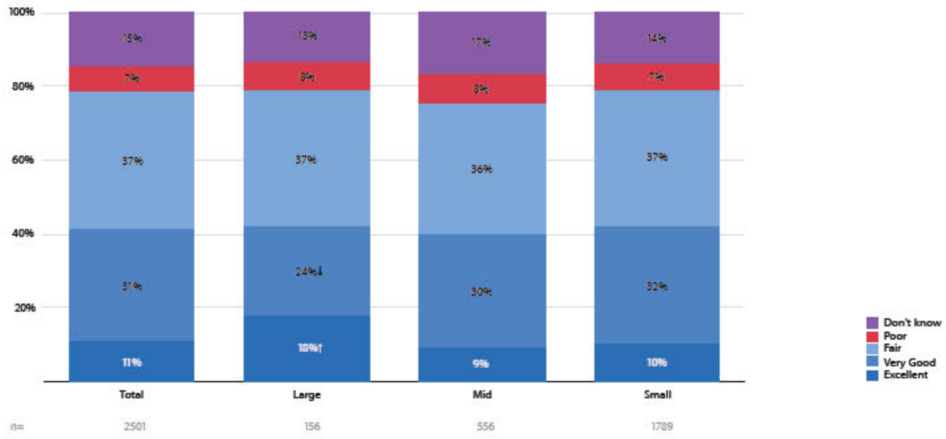
Base: Aware of App Store Marketing GuidelinesD12: When was the last time you visited the App Store Marketing Guidelines page?Note: Arrows denote comparison to small tier developers

75% have visited the App Store Marketing Guidelines within the past year, with large and mid tier developers visiting more recently.

PX- 2300.83

41% rate the App Store Marketing Guidelines' quality of guidance as very good or excellent

Ratings of App Store Marketing Guidelines- Quality of guidance



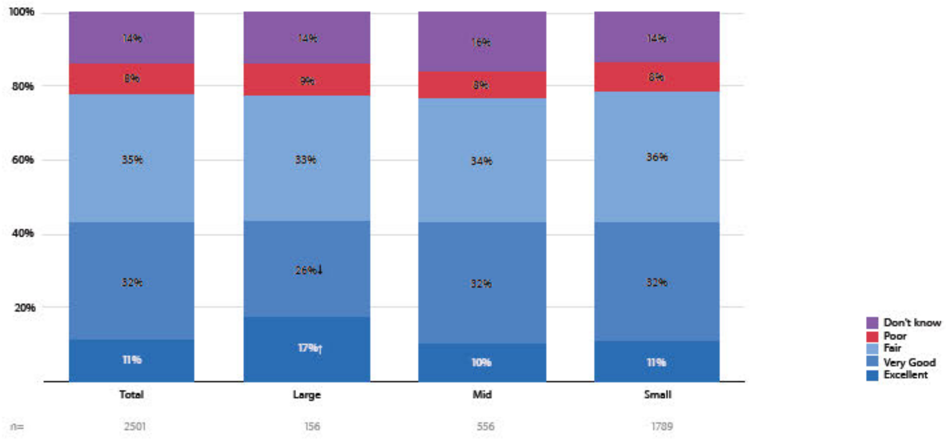
Base: Aware of App Store Marketing GuidelinesD13: How would you rate the App Store Marketing Guidelines on the following?--Quality of guidanceNote: Arrows denote comparison to small tier developers

We asked developers to rate the App Store Marketing Guidelines on the quality of guidance.
Note – this series of questions is missing the mid-point of "good" so it's only a 4 pt scale, so "fair' is probably equal to good/OK.

41% rate the App Store Marketing Guidelines quality of guidance as very good or excellent

43% rate the App Store Marketing Guidelines' ease of use as excellent or very good

Ratings of App Store Marketing Guidelines- Ease of use



Base: Aware of App Store Marketing GuidelinesD13: How would you rate the App Store Marketing Guidelines on the following?--Ease of useNote: Arrows denote comparison to small tier developers

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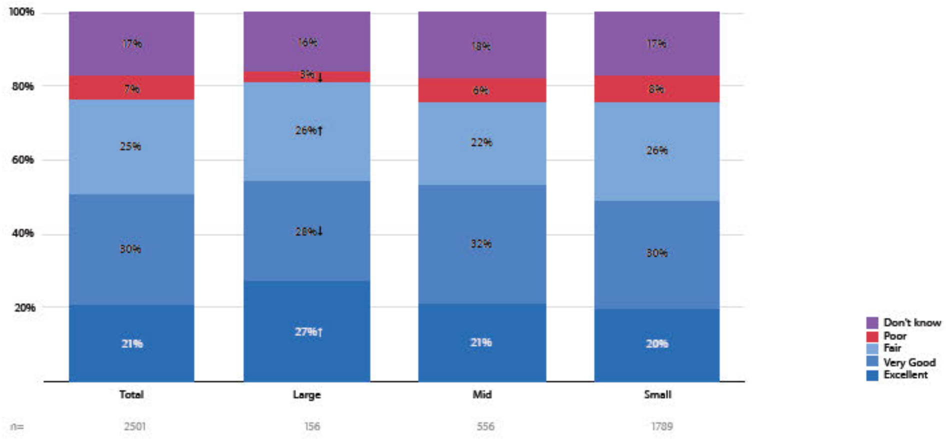
We asked developers to rate the App Store Marketing Guidelines on their ease of use. 43% rate the marketing guidelines ease of use as excellent or very good.

PX- 2300.85

Half rate the access to device image assets as very good or excellent

Ratings of App Store Marketing Guidelines- Access to device image assets



Base: Aware of App Store Marketing GuidelinesD13: How would you rate the App Store Marketing Guidelines on the following?--Access to device image assetsNote: Arrows denote comparison to small tier developers

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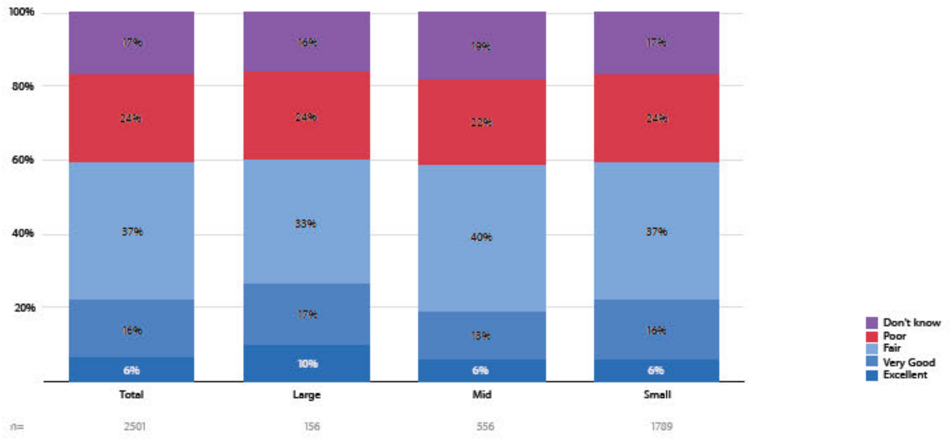
We asked developers to rate access to device images in the guidelines.

If we look at the red, we can see that only a small percentage consider the access to device images to be poor.

PX- 2300.86

One quarter say the guidelines help in improving app marketing is poor

Ratings of App Store Marketing Guidelines- Helps improve my app marketing



Base: Aware of App Store Marketing GuidelinesD13: How would you rate the App Store Marketing Guidelines on the following?—Helps improve my app marketingNote: Arrows denote comparison to small tier developers

Here's where we see a jump in the red. 24% of respondents rate the App Store Marketing Guidelines as poor in helping to improve their app marketing.

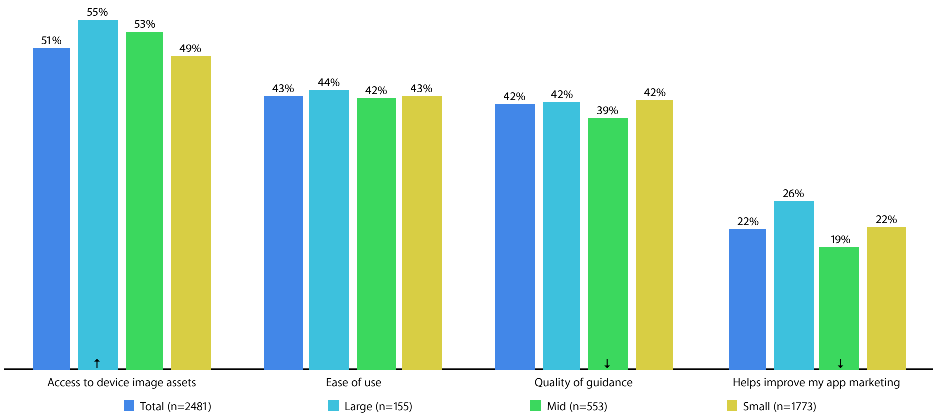
22% overall rate the guidelines as being very good or excellent.

We are looking at ways to test and improve the effectiveness of our guidelines. The guidelines serve Apple from a corporate identity standpoint, but we need to further validate with developers that it helps their marketing as well.

PX- 2300.87

The marketing guidelines access to image assets is the highest rated

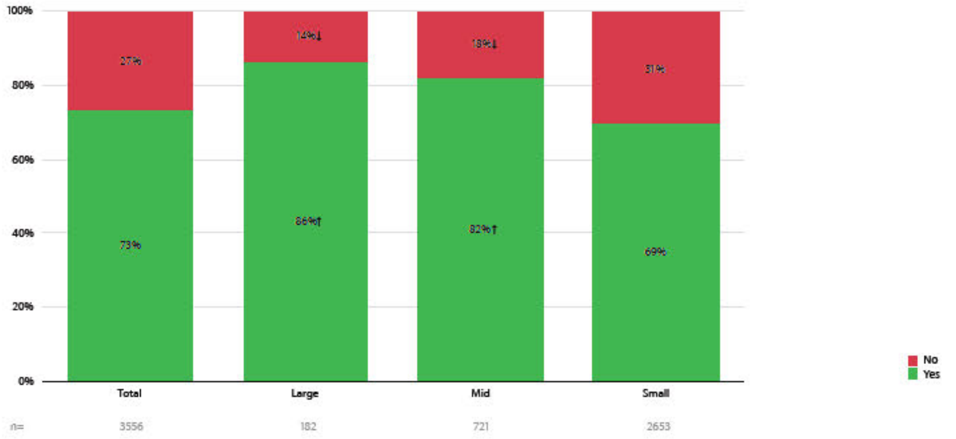
Ratings of App Store Marketing Guidelines (% rating excellent/ very good)



Base: Aware of App Store Marketing GuidelinesD13: How would you rate the App Store Marketing Guidelines on the following?--Summary: PositiveNote: Arrows denote comparison to small tier developers

73% have used the Download on the App Store badge, with usage more common among large and mid tier developers

Used Download on the App Store Badge



Base: All respondentsD14: Have you used the Download on the App Store badge in your marketing?Note: Arrows denote comparison to small tier developers

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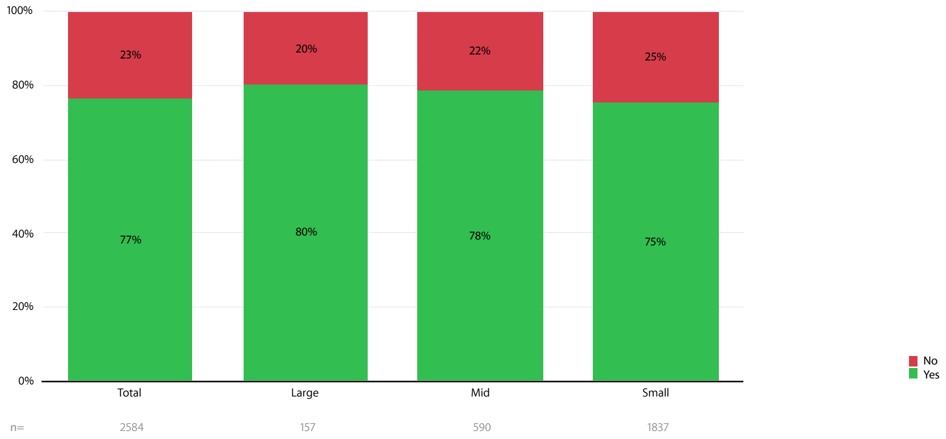
73% of all developers have used the Download on the App Store badge, with 86% of large and 82% of mid tier developers using it

PX- 2300.89

77% regularly use the Download on the App Store badge

Regularly Uses Download on the App Store Badge

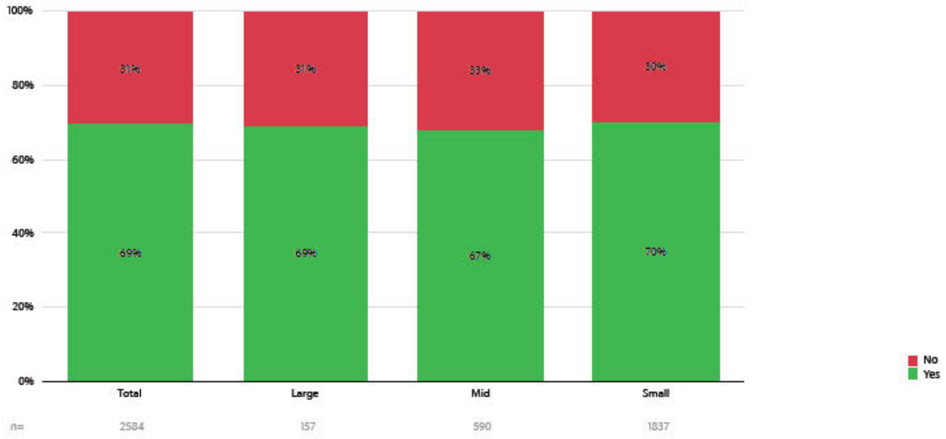


Base: Used Download on App Store Bade in MarketingD15: Do you regularly use the badge in your marketing creative?Note: Arrows denote comparison to small tier developers

PX- 2300.90

69% think the Download on the App Store badge improves engagement with their marketing creative

Download on the App Store Badge Improves Engagement

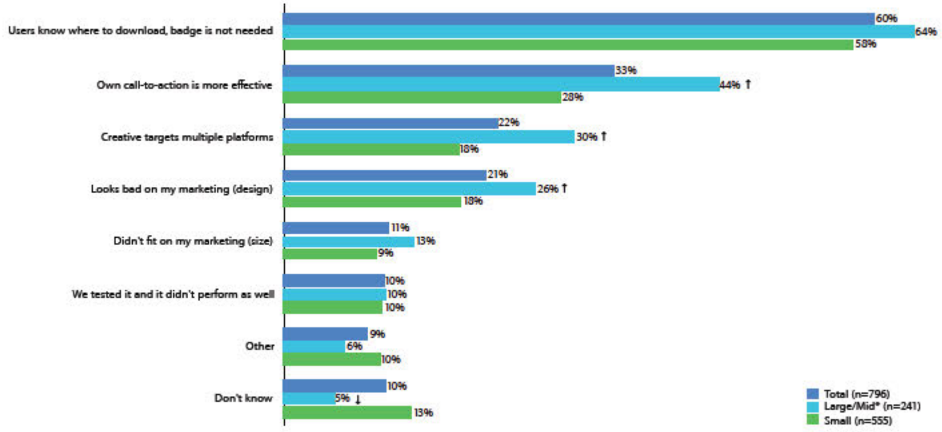


Base: Used Download on App Store Bade in MarketingD16: Do you think the badge helps improve engagement with your marketing creative?Note: Arrows denote comparison to small tier developers

We've run a handful of tests on the effectiveness of the Download on the App Store badge but we're looking to research this further this year. When we put it to developers, 69% of developers say yes, the Download on the App Store badge improves engagement with marketing creative. As you can see, this response was quite consistent across all tiers.

60% of those who don't think the Download on the App Store badge improves engagement with the creative say users already know where to get the app

Reasons Download on the App Store Doesn't Improvement Engagement with Creative



Base: Doesn't think badge helps improve engagement *Note: large and mid size developers combined due to small base sizes
D17: Why don't you think the badge helps improve engagement with your marketing creative? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

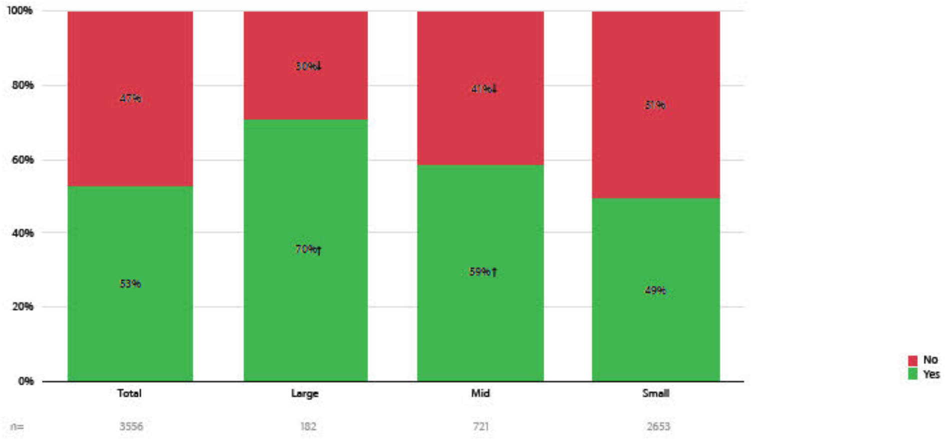
For the 31% who said no, we wanted to find out why not. Developers could select multiple responses.
- 60% say users already know where to get the app
- 44% of large and mid-tier developers said their own call to action was more effective

(Note that large and mid sizes were combined due to small base sizes.)

PX- 2300.92

Half have used Apple device images in their marketing, with large and mid tier developers more likely to have used them

Used Apple Product Images in Marketing



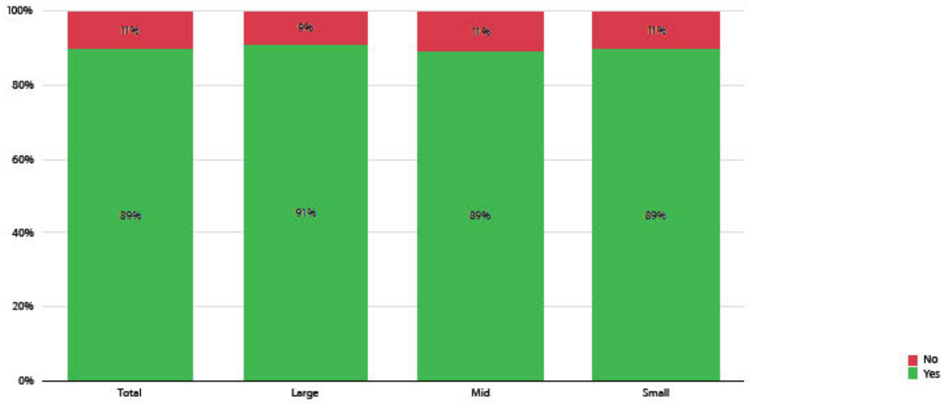
Base: All respondentsD18: Have you used the provided iPhone, iPad, or iPod touch product images in your marketing?Note: Arrows denote comparison to small tier developers

We then asked developers if they have used the device images we provide. Half have used Apple device images in their marketing, with large and mid tier developers more likely to have used them

PX- 2300.93

89% say the Apple device images improve their creative's effectiveness

Apple Product Images Improve Creative Effectiveness



n=	1849	128	422	1299

Base: Used product images in marketingD19: Do you think the images help improve the effectiveness of your creative?Note: Arrows denote comparison to small tier developers

Of those who do use them, 89% say the Apple device images improve their creative's effectiveness. This was quite consistent across all tiers.

PX- 2300.94

31% who don't think the Apple device images improve the effectiveness of their creative say the brand guidelines are too restrictive

Reasons Apple Product Images Don't Improve Creative Effectiveness

	Total	Large/ Mid	Small
Brand guidelines are too restrictive	31%	38%	27%
Prefer to use generic devices to be platform agnostic	22%	19%	23%
Doesn't fit with our design	20%	21%	19%
We tested it and it didn't perform as well	14%	16%	12%
Competitors' brand guidelines are less restrictive	14%	13%	14%
Space doesn't allow	9%	14%	6%
Competitor's device is more effective	3%	2%	4%
Other	16%	16%	16%
Don't know	24%	18%	27%
n=	197	58	139

%	10	20	30	40	50	60	70	80	90	100

Base: Doesn't think product images help improvement effectiveness *Note: large and mid size developers combined due to small base sizes
D20: Why don't you think the images help improve the effectiveness of your creative? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

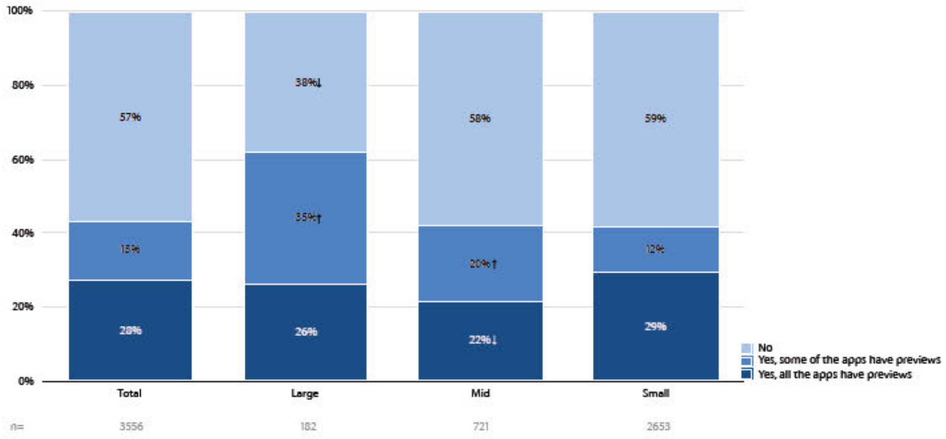
For those who didn't think that the device images were effective
- 31% say the guidelines around their use are too restrictive
- 14% had tested the images to gauge performance and determined that they were not effective

This is another area that we are looking to run more tests on ourselves this year to encourage developer adoption of the brand.

PX- 2300.95

43% say at least some of their apps have previews, with large tier developers more likely to have previews on at least some apps

Apps have Previews on App Store



Base: All respondentsD24: Do your apps have app previews on the App Store?Note: Arrows denote comparison to small tier developers

We wanted to gauge sentiment on other features we offer, such as App Previews.
61% of large developers say at least some of their apps have previews.

PX- 2300.96

28% of those who don't have app previews say the footage is too difficult to capture, while 27% are waiting to submit an app update

Reasons Apps Don't Have Previews

	Total	Large	Mid	Small
Footage is too difficult to capture	28%	27%	30%	27%
Waiting to submit an app update	27%	24%	25%	28%
Not an effective marketing tool for my category	14%	13%	14%	14%
Preview guidelines are too restrictive	11%	24% ↑	15% ↑	9%
Worried my app will get rejected because of the preview	10%	19% ↑	12%	9%
Previews aren't localized	4%	10% ↑	6% ↑	3%
Other	25%	20%	32% ↑	23%
Don't know	17%	14%	13% ↓	19%
n=	2044	70	419	1555

% 10 20 30 40 50 60 70 80 90 100

Base: Apps don't have previews on App StoreD25: Why don't your apps have app previews on the App Store? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

For those who don't have any previews on the App Store we asked why not. 28% say the footage is too difficult to capture, while 27% are waiting to submit an app update.

24% of large developers say the preview guidelines are too restrictive. App Review policy around app preview footage has changed since this survey was sent out, so it will be interesting to see whether this percentage changes in future surveys.

Open answers for "other" responses included
"previews are not within my skill set"
"no capacity to explore this feature", "limited resources"
"wasn't even sure what "app previews" were until I just Googled it"
"haven't gotten around to it yet", "haven't had time"
"can't justify the cost" or "effort vs reward"

We have been working with the Analytics team to measure the conversion rate of apps with app previews, and it has been determined that they are effective in improving conversion rate. When we are able to share this with developers it will encourage wider adoption.

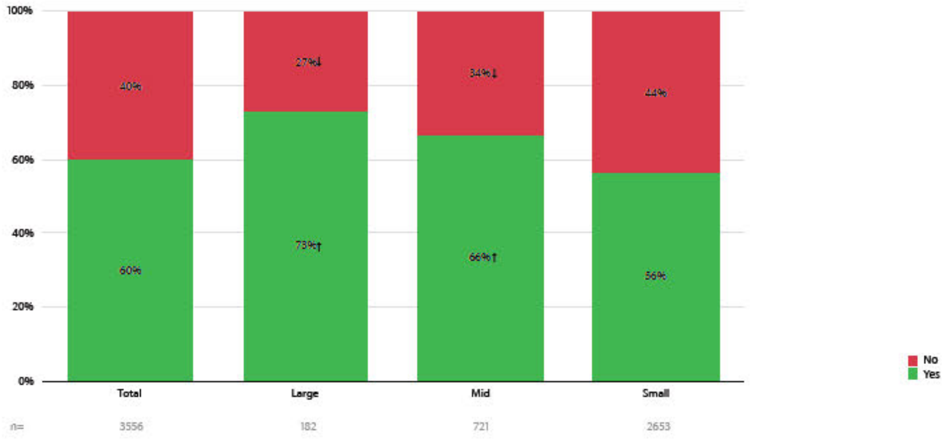
We also need to provide better guidance on how to create app previews so that developers are able to create great app previews on their own.

PX- 2300.97

60% have used TestFlight

Large and mid tier developers are more likely to use TestFlight

Uses TestFlight



Base: All respondentsD21: Do you use TestFlight to beta test iOS apps?Note: Arrows denote comparison to small tier developers

We then asked developer about TestFlight usage.

- 60% overall use TestFlight, with Larger developers skewing higher at 73% percent.

PX- 2300.98

29% of those who don't use TestFlight use another services; 26% didn't know about it

Reasons TestFlight is not Used

	Total	Large/ Medium	Small
Use another service	29%	42% ↑	25%
Didn't know about it	26%	11% ↓	30%
Plan to use in future	14%	11%	14%
Test group size limitations	12%	15% ↑	11%
Beta Review Process is a hassle	6%	9% ↑	6%
Too complicated	4%	6%	4%
No need/not relevant	3%	2%	3%
Need to test other platforms	2%	2%	2%
No time/too busy to test	2%	3%	2%
Don't have testers	2%	2%	2%
Other	13%	13%	13%
Don't know	0%	1%	0%
n=	1529	310	1219

% 10 20 30 40 50 60 70 80 90 100

Base: Does not use TestFlightD22: Why don't you use TestFlight? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

For those who don't user TestFlight, we asked why:

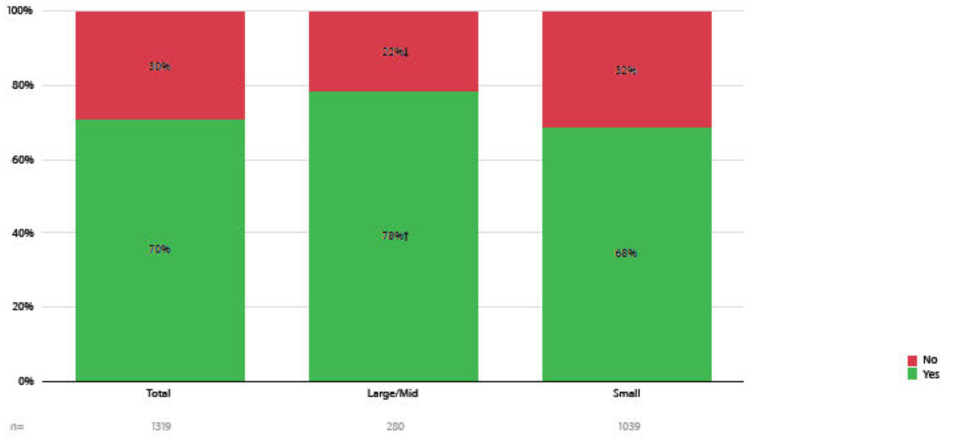
- 29% user another service (42% of large/medium do so)
- 26% didn't know about it (skewing much higher for small developers 30%). We need to get better about communicating our existing best practices documentation, we have a TestFlight page on Apple Developer.

Open answers for "other" responses included:
"I don't know any testers"
"I use a very small test group"
"Never thought about it"
"Development takes most of my time"
"It didn't work on my cheap Android phone"
"On my to-do list"

PX- 2300.99

70% of those with paid apps use our 100 promo codes for their iOS apps

Uses Promo Codes for iOS Apps



Base: Respondents with paid appsD26: Do you use promo codes for your iOS apps?Note: Arrows denote comparison to small tier developers

X

For respondents with paid apps, we asked whether they used our 100 promo codes. 70% do.

Not knowing about promo codes or promo codes not fitting with business model are the most common reason not to use them

Reasons Promo Codes Not Used

	Total	Large/Mid	Small
I didn't know about them	45%	27%	49%
Doesn't fit with business model	20%	38%↓	16%
Not needed	14%	17%↑	13%
Not effective	6%	5%	6%
Haven't had time	5%	6%	5%
Complicated or difficult	4%	3%	4%
No real reason	2%	3%	2%
Not available for in-app purchases	2%	3%	1%
Not applicable to app type	2%	0%	2%
Don't trust reviewers	1%	0%	2%
Did not answer	1%	0%	1%
n=	332	53	279

%	10	20	30	40	50	60	70	80	90	100

Base: Doesn't use promo codes for iOS appsD27: Why don't you use promo codes? (multiple responses allowed)Note: Arrows denote comparison to small tier developers

PX- 2300.101

So, what have we learned?

- Avoid major cultural holidays
- Discoverability and analytics are the top asks from developers
- Many developers have little to no marketing budgets
- We need to demonstrate effectiveness of our tools using data
- We need to continue to demonstrate the ROI of localization
- Developers are looking for guidance to help them make smarter business decisions

In short, we learned a lot. Here are some of our key takeaways:

- We won't be sending this survey out before a major cultural holiday again.
- Better discoverability and analytics are the top asks from developers. We are continuing to refine our guidance on App Store optimization, and the release of iTC App Analytics this quarter will definitely make strides in addressing these pain points
- Our scaled developer outreach needs to provide actionable guidance for the 66% of all developers who are operating on little-to-no marketing budget.
- If we want to influence adoption of our features and tools, we need to have data to support their effectiveness.
- We need to demonstrate ROI of localization and provide local market expertise, which we're working on providing as part of our scaled developer outreach.
- We need to help developers make smarter business decisions on business models, pricing strategies, engagement and monetization. We need to provide more transparency on how the App Store works (e.g., store turn). And we need to better communicate the existing guidance we have.

PX- 2300.102